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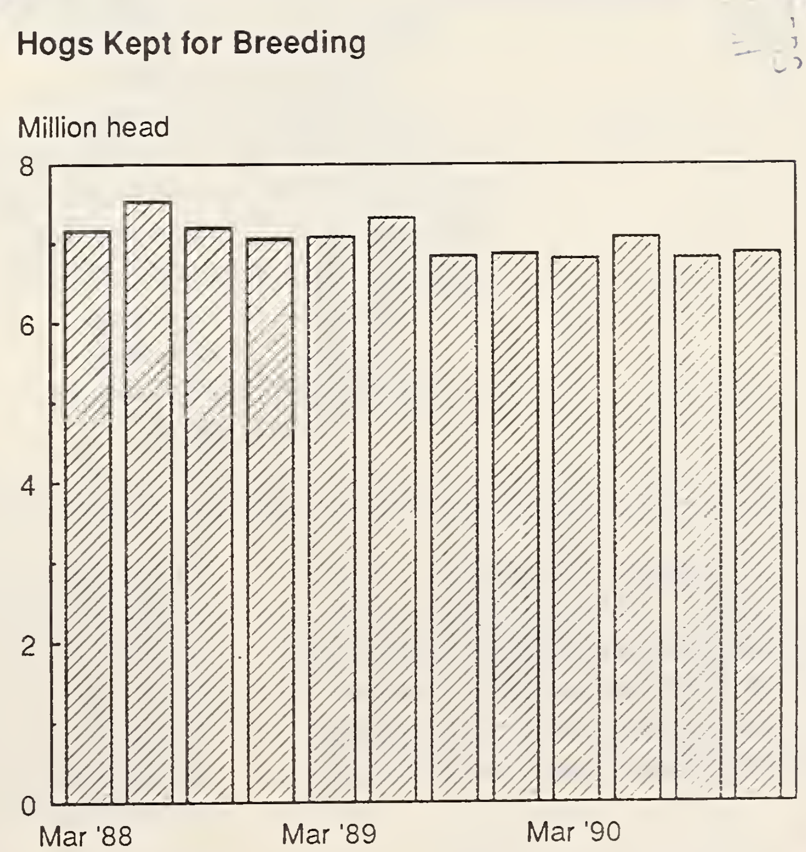
Livestock and Poultry

Situation and Outlook Report



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The present forecasts will be updated, if needed, in the World Agricultural Supply and Demand Estimates scheduled for release on February 11, 1991.

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Summary

Record large red meat and poultry supplies are expected in 1991, due to a continuing expansion in poultry and, for the first time since 1988, slight increases in red meat production. Feed costs are projected lower, which will help reduce production costs. Prices will be dampened by the resulting large supplies and a recession during the first half of 1991. However, the recession is expected to dissipate in the second half of the year.

The December 1, 1990, hogs and pigs inventory was up 1 percent from a year earlier. Farrowing intentions for December-February were up 2 percent, but March-May intentions were down 2 percent. Pork production this year is expected to rise 2 percent, with most of the year-over-year increases in mid-1991. At the seven markets, barrow and gilt prices are expected to average $50-$56 per cwt in 1991, compared with $54 in 1990. Hog prices in this range, combined with lower feed costs, should keep producers' returns favorable and encourage them to expand breeding herds. Despite a year of favorable returns, they have shown a reluctance to expand herds.

Pork prices rose relative to other meats in 1990, reaching a record high in the second half of the year. During 1991, retail pork prices are expected to average about the same as last year. Retail beef prices are expected to rise 1-2 percent from a year ago. Retail broiler prices are projected to decline 1-2 percent and turkey prices to remain about the same.

Beef production is expected to rise nearly 2 percent in 1991 as fed cattle marketings increase. Cow slaughter is expected to remain near the low 1990 level, with beef cow slaughter declining and dairy slaughter rising, particularly in second-half 1991. Carcass weights will probably remain near, to slightly above, the 681 pounds of a year earlier. Lower feed prices and tight feeder cattle supplies will likely encourage feedlot placements at somewhat lighter weights and marketing weights that will level off from the sharp increases of recent years.

Broiler production is projected to expand 5 percent in 1991. Wholesale prices are expected to average 51-57 cents per pound, compared with 55 cents a year earlier. Turkey production likely will increase 5 percent in 1991, compared with a 9 percent rise in 1990. Wholesale turkey prices are expected to average 60-66 cents per pound, compared to 63 cents last year.

Total egg production is expected to rise 1 percent in 1991 over 1990, while table eggs will increase at a slower rate. Wholesale egg prices are expected to average 73-79 cents per dozen, down from 82 cents in 1990. Retail egg prices are projected 11 to 15 percent below the year-earlier average of $1.01 per dozen.

Table 1--Livestock, poultry, and egg production and prices (All percent changes shown are from a year earlier.)

Item	1988	1989	1990			1991 1/				
	Annual	Annual	III	IV 1/	Annual 1/	I	II	III	IV	Annual
					Million pounds					
Production:										
Beef	23,424	22,974	5,814	5,575	22,629	5,525	5,725	6,000	5,750	23,000
% change	0	-2	-1	-3	-2	0	0	3	3	2
Pork	15,623	15,759	3,639	4,125	15,311	3,875	3,775	3,775	4,175	15,600
% change	9	1	-4	-1	-3	-1	4	4	1	2
Lamb & mutton	329	341	85	91	359	95	88	88	92	363
% change	6	4	5	0	5	2	-2	4	1	1
Veal	387	344	80	88	321	74	72	73	73	292
% change	-7	-11	-5	5	-7	-6	-3	-9	-17	-9
Total red meat	39,763	39,418	9,618	9,879	38,620	9,569	9,660	9,936	10,090	39,255
% change	3	-1	-2	-2	-2	0	1	3	2	2
Broilers 2/	16,124	17,334	4,630	4,790	18,572	4,750	4,975	4,900	4,900	19,525
% change	4	8	5	8	7	6	7	6	2	5
Turkeys 2/	3,923	4,175	1,223	1,250	4,558	1,030	1,150	1,290	1,300	4,770
% change	6	6	4	6	9	5	4	5	4	5
Total poultry 3/	20,588	22,039	5,982	6,160	23,657	5,915	6,265	6,315	6,335	24,830
% change	4	7	5	8	7	5	6	6	3	5
Total red meat and poultry	60,351	61,457	15,600	16,039	62,277	15,484	15,925	16,251	16,425	64,085
% change	4	2	0	1	1	2	3	4	2	3
					Million dozen					
Eggs	5,784	5,587	1,412	1,448	5,664	1,415	1,430	1,425	1,445	5,715
% change	-1	-3	2	2	1	2	1	1	0	1
Prices					Dollars per cwt					
Choice steers, Omaha 1000-1100 lb.	69.54	72.52	75.48	79.44	77.40	76-80	76-82	74-80	76-82	75-81
Barrows and gilts, 7-markets	43.39	44.03	57.67	51.67	54.45	50-54	51-57	53-59	48-54	50-56
Slaughter lambs, Ch., San Angelo	68.26	67.32	52.07	50.33	55.42	55-59	57-63	50-56	50-56	53-59
					Cents per pound					
Broilers, 12-city avg. 4/	56.3	59.0	57.2	48.8	54.8	50-54	52-58	53-59	50-56	51-57
Turkeys, Eastern region 5/	61.2	66.7	66.3	68.6	63.2	52-56	57-63	64-70	67-73	60-66
					Cents per dozen					
Eggs New York 6/	62.1	81.9	77.8	88.5	82.2	82-86	69-75	71-77	73-79	73-79

1/ Projected. 2/ Federally inspected. 3/ Includes broilers, turkeys, and mature chickens. 4/ Wholesale weighted average. 5/ Wholesale, 8- to 16-pound young hens. 6/ Cartoned, consumer Grade A large, sales to volume buyers.

Factors Affecting Livestock and Poultry

Recent data suggest that the economy entered a recession in late summer of 1990. An expected decline in fourth-quarter real gross national product (GNP) will reveal the magnitude of the downturn. However, many economists believe the recession will be relatively mild, only lasting through the first half of the year. Real GNP growth for 1991 is expected to be quite low, if there is any growth at all. This follows moderate growth of 2.5 percent in 1989 and anemic growth of just less than 1 percent in 1990.

Several items contributed to the weak economy: high oil prices, low consumer confidence levels, pessimistic business expectations, and heightened international and domestic uncertainties. Factors that should mitigate the severity of the downturn are reduced inventories and falling interest rates. In addition, the low value of the dollar should stimulate exports.

In an attempt to reduce the severity of the downturn, the Federal Reserve pushed interest rates down at the end of 1990 and beginning of 1991. The discount rate, the rate at which banks borrow from the Federal Reserve, was cut from 7 to 6.5 percent. The Federal Reserve also lowered reserve requirements. The Federal Reserve target for the Federal funds rate, the rate at which banks borrow from each other, and the primary indicator of Federal Reserve policy, has been lowered three times since mid-November. These policy actions have prompted major banks to cut their prime rate from 10 to 9.5 percent at the beginning of January. Interest rates might decline further during 1991. Inflation was slightly higher in 1990 than in 1989, due mainly to the oil price shock beginning in August 1990.

Feed costs in 1991 are expected to decline, reflecting lower protein feedstuff prices. Soybean meal prices in the 1990/91 marketing year are projected to average $150-175 per short ton, compared with an estimated $174 in 1989/90. Farm corn prices are expected to average $2.20-2.50 per bushel in 1990/91, compared with an estimated $2.36 in 1989/90. However, the projected 1990/91 ending stocks of corn are relatively low. Thus, corn prices during the growing season will be sensitive to weather conditions.

Livestock and Red Meats

Hogs

Despite a year of favorable returns, hog producers are showing a reluctance to expand breeding herds. In past years, producers have typically begun adding to the breeding herd after 6-9 months of favorable returns. In general, returns have been positive since the beginning of 1990. However, the number of hogs kept for breeding on both September 1 and December 1 was about the same as a year earlier. The September-November pig crop was above a year earlier, the only quarter in 1990 that was larger. For all of 1990, pork production was down 3 percent, but a 2-percent increase is projected for 1991.

Market Hog Inventory Up, Breeding Hog Numbers Unchanged

As of December 1, 1990, the inventory of all hogs and pigs in the United States was estimated a 54.6 million head, 1 percent above a year ago. The market hog inventory was up 2 percent and hogs kept for breeding were virtually unchanged from a year earlier. In the 10 major hog producing States, the number of hogs kept for breeding has shown a year-over-year decline each quarter since December 1988. However, the decline in the last two has been very small.

Table 2--Hogs on farms, farrowings, and pig crops, United States

Inventory	1989	1990	1991	1990 / 1989	1991 / 1990
	1,000 head			Percent change	
March 1 inventory	52,965	51,150		-3	
Breeding	7,081	6,806		-4	
Market	45,884	44,344		-3	
Under 60 lb	17,624	16,895		-4	
60-119 lb	10,995	10,602		-4	
120-179 lb	9,493	9,209		-3	
180 + lb	7,772	7,638		-2	
June 1 inventory	55,880	53,850		-4	
Breeding	7,315	7,075		-3	
Market	48,565	46,775		-4	
Under 60 lb	20,687	19,806		-4	
60-119 lb	12,090	11,718		-3	
120-179 lb	8,785	8,535		-3	
180 + lb	7,003	6,716		-4	
Sept. 1 inventory	57,315	55,940		-2	
Breeding	6,832	6,815		-0	
Market	50,483	49,125		-3	
Under 60 lb	19,150	18,936		-1	
60-119 lb	12,502	12,218		-2	
120-179 lb	10,559	10,132		-4	
180 + lb	8,272	7,839		-5	
Dec. 1 inventory	53,821	54,562		1	
Breeding	6,862	6,872		0	
Market	46,959	47,690		2	
under 60 lb	17,195	17,881		4	
60-119 lb	12,183	12,224		0	
120-179 lb	9,673	9,679		0	
180 + lb	7,908	7,906		-0	
Sows farrowing					
Dec. 1/-Feb.	2,723	2,600	2,642 2/	-5	2
March-May	3,318	3,142	3,071 2/	-5	-2
Dec. 1/-May	6,041	5,742	5,713 2/	-5	-1
June-August	2,977	2,879		-3	
Sept.-Nov.	2,798	2,819		1	
June-Nov.	5,775	5,698		-1	
Pig crop					
Dec. 1/-Feb.	21,168	20,349		-4	
March-May	26,070	24,958		-4	
Dec. 1/-May	47,238	45,307		-4	
June-August	23,192	22,737		-2	
Sept.-Nov.	21,644	22,044		2	
June-Nov.	44,836	44,780		-0	
	Number				
Pigs per litter					
Dec. 1/-Feb.	7.77	7.83		1	
March-May	7.86	7.94		1	
Dec. 1/-May	7.82	7.89		1	
June-Aug.	7.79	7.90		1	
Sept.-Nov.	7.74	7.82		1	
June-Nov.	7.76	7.86		1	

1/ December preceding year. 2/ Intentions

Table 3--Hogs on farms, farrowings, and pig crops, 10 States

Inventory	1989	1990	1991	1990 / 1989	1991 / 1990
	1,000 head			Percent change	
March 1 inventory	41,655	40,190		-4	
Breeding	5,445	5,245		-4	
Market	36,210	34,945		-3	
Under 60 lb	13,865	13,289		-4	
60-119 lb	8,678	8,335		-4	
120-179 lb	7,545	7,338		-3	
180 + lb	6,122	5,983		-2	
June 1 inventory	44,020	42,630		-3	
Breeding	5,550	5,405		-3	
Market	38,470	37,225		-3	
Under 60 lb	16,315	15,680		-4	
60-119 lb	9,600	9,325		-3	
120-179 lb	6,995	6,845		-2	
180 + lb	5,560	5,375		-3	
Sept. 1 inventory	45,050	44,120		-2	
Breeding	5,320	5,300		-0	
Market	39,730	38,820		-2	
Under 60 lb	15,045	14,880		-1	
60-119 lb	9,845	9,580		-3	
120-179 lb	8,430	8,190		-3	
180 + lb	6,410	6,170		-4	
Dec. 1 inventory	42,200	43,000		2	
Breeding	5,275	5,262		-0	
Market	36,925	37,738		2	
under 60 lb	13,450	14,125		5	
60-119 lb	9,602	9,713		1	
120-179 lb	7,609	7,640		0	
180 + lb	6,264	6,260		-0	
Sows farrowing					
Dec. 1/-Feb.	2,114	2,028	2,047 2/	-4	1
March-May	2,585	2,458	2,400 2/	-5	-2
Dec. 1/-May	4,699	4,486	4,447 2/	-5	-1
June-August	2,309	2,236		-3	
Sept.-Nov.	2,195	2,223		1	
June-Nov.	4,504	4,459		-1	
Pig crop					
Dec. 1/-Feb.	16,481	15,870		-4	
March-May	20,348	19,576		-4	
Dec. 1/-May	36,829	35,446		-4	
June-August	18,049	17,684		-2	
Sept.-Nov.	16,929	17,342		2	
June-Nov.	34,978	35,026		0	
	Number				
Pigs per litter					
Dec. 1/-Feb.	7.80	7.83		0	
March-May	7.87	7.96		1	
Dec. 1/-May	7.84	7.90		1	
June-Aug.	7.82	7.91		1	
Sept.-Nov.	7.71	7.80		1	
June-Nov.	7.77	7.86		1	

1/ December preceding year. 2/ Intentions

The 1988 liquidation was triggered by the 1988 drought that caused feed costs to rise sharply and producers' returns to drop. Between November 1988 and May 1989, hog producers experienced negative net returns after cash expenses. Producers' returns improved substantially in second-half 1989 as feed costs declined and hog prices strengthened. By the beginning of 1990, net returns were above total costs. Returns were favorable throughout 1990, reaching relatively high levels in mid-1990 as hog prices rose sharply. However, returns were tempered somewhat by rising feed costs in first-half 1990, due to 1990 corn crop concerns.

Producers' returns are expected to remain favorable in 1991. Feed costs are projected to be lower, and hog prices are expected to be near last year's level. Before the release of the *December Hogs and Pigs* report, deferred hog futures were trading in the high $40's per cwt, sharply below the currently projected prices of low- to mid-$50's. The low hog futures likely reflected anticipated higher pork production and concern about a recession. These factors might explain why producers took a conservative approach and reduced farrowing intentions for March-May 1991 from the same period a year ago.

Pork Production To Increase

Based on the December market hog inventory and farrowing intentions, commercial pork production in 1991 is projected to total about 15.6 billion pounds, up 2 percent from a year ago. The forecast is down slightly from earlier projections, due to lower-than-anticipated March-May farrowing intentions that were reported down 2 percent from a year ago. Previously, March-May farrowing intentions were anticipated to be moderately higher than the same period in 1990. Minor revisions were made to reflect the slightly smaller-than-anticipated September-November pig crop.

Slaughter in the first quarter is indicated by the December 1 market hogs weighing 60-179 pounds and the June-August pig crop. The market hog inventory was about the same as a year earlier, and the June-August pig crop was down 2 percent from 1989. First-quarter 1991 slaughter is projected at 21.5 million head, down 2 percent from 1990. The heavy dressed weights seen in fourth-quarter 1990 have continued into 1991. Thus, the average dressed weight for January-March is projected to be a little heavier than a year ago. Projected commercial production at 3,875 million pounds is down only 1 percent from last year.

Table 4--Summer pig crop and hog slaughter

Year	Pig crop June-Aug.	Commercial slaughter, Jan-Mar. 1/	Slaughter as percentage of pig crop
	- - - 1,000 head - - -		Percent
1970	25,142	24,256	96.5
1971	23,260	22,261	95.7
1972	21,838	20,225	92.6
1973	21,209	20,150	95.0
1974	20,273	18,760	92.5
1975	18,022	17,432	96.7
1976	21,656	19,770	91.3
1977	22,239	19,404	87.3
1978	22,937	20,040	87.4
1979	26,915	24,236	90.0
1980	24,417	23,678	97.0
1981	23,548	21,714	92.2
1982	21,383	20,212	94.5
1983	23,361	21,807	93.3
1984	22,346	20,871	93.4
1985	22,010	20,379	92.6
1986	21,280	19,940	93.7
1987	22,904	21,360	93.3
1988	23,414	21,876	93.4
1989	23,192	21,879	94.3
1990	22,737		

1/ January-March of the following year.

Source: Economic Research Service.

Table 5--Fall pig crop and hog slaughter

Year	Pig crop Sept.-Nov.	Commercial slaughter, Apr.-June 1/	Slaughter as percentage of pig crop
	- - - 1,000 head - - -		Percent
1970	24,446	23,609	96.6
1971	22,746	21,389	94.0
1972	21,213	19,478	91.8
1973	20,789	21,014	101.1
1974	18,679	17,808	95.3
1975	17,634	16,821	95.4
1976	20,562	18,743	91.2
1977	20,963	19,042	90.8
1978	23,094	21,740	94.1
1979	25,326	25,039	98.9
1980	25,015	22,594	90.3
1981	22,700	20,712	91.2
1982	22,231	21,666	97.5
1983	22,424	21,124	94.2
1984	21,837	21,343	97.7
1985	21,480	20,316	94.6
1986	20,846	18,911	90.7
1987	22,023	20,877	94.8
1988	22,586	21,944	97.2
1989	21,644	20,257	93.6
1990	22,044		

1/ April-June of the following year.

Source: Economic Research Service.

Table 6--Winter pig crop and hog slaughter

Year	Pig crop Dec.-Feb.	Commercial slaughter, July-Sept.	Slaughter as percentage of pig crop
	- - - 1,000 head - - -		Percent
1970	19,771	20,619	104.3
1971	20,959	22,308	106.4
1972	19,252	19,441	101.0
1973	19,050	16,875	88.6
1974	18,509	19,705	106.5
1975	15,287	15,307	100.1
1976	17,572	17,982	102.3
1977	18,532	18,293	98.7
1978	18,807	18,554	98.7
1979	21,887	22,083	100.9
1980	23,685	22,158	93.6
1981	21,045	21,277	101.1
1982	18,759	18,940	101.0
1983	20,877	21,374	102.4
1984	18,757	19,495	103.9
1985	19,101	20,556	107.6
1986	18,567	18,573	100.0
1987	19,484	19,396	99.5
1988	21,061	21,378	101.5
1989	21,168	21,567	101.9
1990	20,349	20,350	100.0

Source: Economic Research Service.

Second-quarter indicators are the December 1 market hog inventory weighing less than 60 pounds and the September-November pig crop. These indicators of slaughter were up 4 and 2 percent, respectively, from 1989. Second-quarter 1991 slaughter is projected up about 4 percent. Slaughter in 1990, as a percentage of the September-November pig crop, was low in relationship to the historical average.

The December-May pig crop is an indicator of slaughter in the second half of the year. As of December 1, producers planned to have 1 percent fewer sows farrow in this period

Table 7--Spring pig crop and hog slaughter

Year	Pig crop Mar.-May	Commercial slaughter, Oct.-Dec.	Slaughter as percentage of pig crop
	- - - 1,000 head - - -		Percent
1970	32,355	25,271	78.1
1971	30,959	24,264	78.4
1972	28,271	21,617	76.5
1973	27,075	20,217	74.7
1974	26,283	20,893	79.5
1975	20,243	16,813	83.1
1976	24,605	21,549	87.6
1977	24,428	20,497	83.9
1978	23,674	20,316	85.8
1979	28,664	25,237	88.0
1980	28,603	24,641	86.1
1981	26,560	24,026	90.5
1982	22,816	20,825	91.3
1983	26,532	24,334	91.7
1984	23,646	22,742	96.2
1985	23,445	21,721	92.6
1986	21,878	20,330	92.9
1987	24,012	22,834	95.1
1988	25,822	24,180	93.6
1989	26,070	23,304	89.4
1990	24,958		

Source: Economic Research Service.

than in 1989-90. Because pigs per litter have generally increased each quarter in recent years, the December 1990-May 1991 pig crop is expected to be about the same as a year ago. However, slaughter as a percentage of the pig crop was lower in 1990 than expected from recent trends. So, second-half-1991 slaughter is projected nearly 3 percent above last year, a return to the historical average.

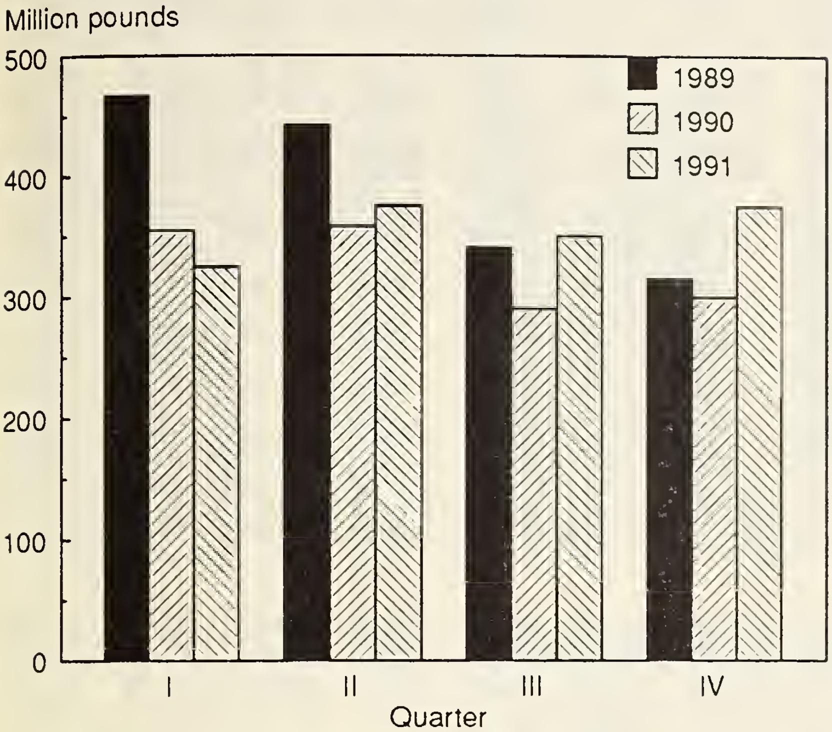
Frozen Pork Stocks Expected To Increase

Frozen pork stocks in cold storage were relatively small, especially in late summer and early fall of 1990. As wholesale prices dropped in late fall, product begin moving into the freezer, especially bellies. In 1991, freezer stocks of pork are expected to show a year-over-year increase by the end of the second quarter. However, the increase in stocks is expected to be below the typical seasonal buildup, due to the anticipated, relatively steady production pattern.

Hog Prices To Average in Low-to-Mid $50's

Barrows and gilts at the seven major markets are expected to average $50 to $56 per cwt in 1991, compared with $54 in 1990. The quarterly-price pattern is projected to be somewhat different. The first and fourth quarters are expected to average in the low-$50's per cwt, with the second and third averaging in the mid-$50's per cwt. In 1990, in the first quarter, hog prices averaged $49 per cwt. In the second, third, and fourth, prices averaged $59, $57, and $52 per cwt, respectively. Most of the price leveling in 1991 is due to the moderate rise in production in the spring and summer, while production in the winter and fall is changed only slightly from a year earlier.

Figure 1
Frozen Pork Stocks in Cold Storage



Continuing increases in poultry and very little, if any, growth in real per capita income will continue to dampen pork and hog prices. However, continued record retail beef prices will be supportive. Retreating retail pork prices and a greater opportunity to feature pork cuts should help moderate any slump in hog prices.

Retail Pork Prices To Remain Steady

Retail pork prices in 1991 are expected to average about the same as the $2.13 per pound in 1990. However, the price pattern will be somewhat different, with prices declining from the record levels reached in second-half 1990. Farm-to-retail spreads in 1991 are expected to remain near the $1.26 per pound of a year earlier. As 1991 progresses, price spreads and hog prices are expected to be moderately below a year earlier, encouraging some pork featuring. In the second and third quarters of 1990, very little pork was featured. In the fourth quarter, price spreads are expected to be below the record levels of a year ago. The lower spreads are expected to let retail prices fall to their lowest level of the year.

Table 8--Farrow-to-finish hog production costs and returns, 1,600 head annual sales, North Central Region 1/

Item	1990									
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Dollars per cwt									
Cash receipts: 2/										
Market hogs (94.25 lb)	48.81	51.19	58.61	58.03	58.76	53.50	52.00	54.52	48.35	48.57
Cull sows (5.75 lb)	2.63	2.81	3.05	2.93	2.73	2.76	2.63	2.78	2.57	2.56
Total	51.44	54.00	61.66	60.96	61.49	56.26	54.63	57.30	50.92	51.13
Cash expenses:										
Feed--										
Corn (345.6 lb)	14.27	14.29	14.18	13.89	14.20	14.78	15.36	15.54	15.46	14.92
Soybean meal (70.6 lb)	9.33	9.33	8.76	8.76	8.76	8.25	8.25	8.25	7.92	7.92
Mixing concentrates (14.3 lb)	3.05	3.05	2.97	2.95	2.95	2.95	2.96	2.92	2.87	2.86
Total feed	26.65	26.67	25.91	25.60	25.91	25.98	26.57	26.71	26.25	25.70
Other--										
Veterinary and medicine 3/	0.80	0.80	0.77	0.77	0.77	0.77	0.77	0.76	0.75	0.74
Fuel, lube, and electricity	1.58	1.58	1.59	1.48	1.47	1.46	1.50	1.50	1.50	1.46
Machinery and building repairs	2.55	2.45	2.45	2.45	2.45	2.45	2.46	2.42	2.41	2.42
Hired labor 4/	1.53	1.36	1.36	1.36	1.36	1.36	1.40	1.32	1.32	1.32
Miscellaneous	0.70	0.70	0.65	0.65	0.64	0.64	0.65	0.65	0.63	0.63
Total variable expenses	33.81	33.56	32.73	32.31	32.60	32.66	33.35	33.36	32.86	32.27
General farm overhead	2.04	2.14	2.28	2.24	2.25	2.06	2.01	2.13	1.83	1.83
Taxes and insurance	0.72	0.72	0.69	0.68	0.68	0.65	0.68	0.66	0.65	0.65
Interest	4.09	4.30	4.91	4.85	4.89	4.48	4.35	4.56	4.05	4.07
Total fixed expenses	6.85	7.16	7.88	7.77	7.82	7.19	7.04	7.35	6.53	6.55
Total cash expenses 5/	40.66	40.72	40.61	40.08	40.42	39.85	40.39	40.71	39.39	38.82
Receipts less cash expenses	10.78	13.28	21.05	20.88	21.07	16.41	14.24	16.59	11.53	12.31
Capital replacement	6.11	6.15	5.90	5.89	5.92	5.94	6.01	6.04	5.92	5.87
Receipts less cash expenses and replacement	4.67	7.13	15.15	14.99	15.15	10.47	8.23	10.55	5.61	6.44

1/The feed rations and expense items do not necessarily coincide with the experience of the individual hog operator and are an average of a group of operations. For individual use, adjust expenses and prices for management, production level, and locality of operation. 2/ Based on 94.25 lb of barrows and gilts liveweight and 5.75 lb of sows per cwt sold. 3/ Includes costs of feed medication, that is usually included as part of the feed cost. 4/ Based on .204 hours per cwt of liveweight hog marketed. 5/ Does not include a charge for family or operator labor (.732 hours)

Table 9--Corn Belt hog feeding: Selected costs at current rates 1/

Purchased during 1989-90 / Marketed during 1989-90	Jan. May	Feb. June	Mar. July	Apr. Aug.	May Sept.	June Oct.	July Nov.	Aug. Dec.	Sept. Jan.	Oct. Feb.	Nov. Mar.	Dec. Apr.
Expenses: ($/head)												
40-50 lb feeder pig	44.58	54.41	63.19	64.97	56.80	47.32	46.35	45.85	45.91	52.33	46.22	49.63
Corn (11 bu)	24.42	24.75	25.85	27.83	29.04	29.59	28.88	27.28	25.14	23.98	23.76	23.98
Protein supplement (130 lb)	19.83	19.83	19.83	18.98	18.98	18.98	19.50	19.50	19.50	19.50	19.50	19.50
Total feed	44.25	44.58	45.68	46.81	48.02	48.57	48.38	46.78	44.64	43.48	43.26	43.48
Labor & management (1.3 hr)	13.48	13.48	13.48	12.74	12.74	12.74	12.61	12.61	12.61	13.26	13.26	13.26
Vet medicine 2/	2.95	2.95	2.95	2.98	2.98	2.98	2.99	2.99	2.99	3.05	3.05	3.05
Interest on purchase (4 mo)	1.79	2.18	2.53	2.57	2.25	1.87	1.84	1.82	1.82	2.07	1.83	1.96
Power, equip, fuel, shelter deprec. 2/	7.18	7.18	7.18	7.26	7.26	7.26	7.29	7.29	7.29	7.44	7.44	7.44
Death loss (4% of purchase)	1.78	2.18	2.53	2.60	2.27	1.89	1.85	1.83	1.84	2.09	1.85	1.99
Transportation (100 miles)	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
Marketing expenses	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Misc. & indirect costs 2/	0.74	0.74	0.74	0.74	0.74	0.74	0.75	0.75	0.75	0.76	0.76	0.76
Total	118.37	129.32	139.90	142.29	134.68	124.99	123.68	121.54	119.47	126.10	119.29	123.19
Selling price required to cover: ($/cwt)												
Feed and feeder costs (220 lb)	40.38	45.00	49.49	50.81	47.65	43.59	43.06	42.10	41.16	43.55	40.67	42.32
All costs (220 lb)	53.80	58.78	63.59	64.68	61.22	56.81	56.22	55.25	54.30	57.32	54.22	56.00
Feed cost per 100-lb gain (180 lb)	24.58	24.77	25.38	26.01	26.68	26.98	26.88	25.99	24.80	24.16	24.03	24.16
Barrows and gilts, (7 mkts)	62.18	60.75	61.87	56.05	55.10	57.15	49.70	48.15				
Net margin	8.38	1.97	-1.72	-8.63	-6.12	0.34	-6.52	-7.10				
Prices:												
40-lb feeder pig (So. Missouri) $/head	44.58	54.41	63.19	64.97	56.80	47.32	46.35	45.85	45.91	52.33	46.22	49.63
Corn $/bu 3/	2.22	2.25	2.35	2.53	2.64	2.69	2.63	2.48	2.29	2.18	2.16	2.18
Protein supp. 38-42 % $/cwt 4/	15.25	15.25	15.25	14.60	14.60	14.60	15.00	15.00	15.00	15.00	15.00	15.00
Labor & management $/hr 5/	10.37	10.37	10.37	9.80	9.80	9.80	9.70	9.70	9.70	10.20	10.20	10.20
Interest rate, annual	12.02	12.02	12.02	11.88	11.88	11.88	11.88	11.88	11.88	11.87	11.87	11.87
Transportation rate ($/cwt 100 miles) 6/	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Marketing Expenses ($/cwt) 7/	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Index of prices paid by farmers (1910-14=100)	1246	1246	1246	1260	1260	1260	1265	1265	1265	1291	1291	1291

1/ Although a majority of operations in the Corn Belt are from farrow-to-finish, relative fattening expenses will be similar. Costs represent only what expenses would be if all selected items were paid for during the period indicated. The feed rations and expense items do not necessarily coincide with the experience of individual feeders. For individual use, adjust expenses and prices for management, production level, and locality of operation. 2/ Adjusted monthly by the index of prices paid by farmers for commodities, services, interest, taxes, and wage rates. 3/ Average price received by farmers in Iowa and Illinois. 4/ Average prices paid by farmers in Iowa and Illinois. 5/ Assumes an owner-operator receiving twice the farm labor rate. 6/ Converted from cents/mile for a 44,000-pound haul. 7/ Yardage plus commission fees at a Midwest terminal market.

Table 10--Sow slaughter balance sheet, United States

Item	1989	1990	1991
		1,000 head	
December 1 breeding 1/	7,054	6,862	6,872
December-February			
Comm. sow slaughter	957	934	
Gilts added	984	878	
March 1 breeding	7,081	6,806	
March-May			
Comm. sow slaughter	975	893	
Gilts added	1,209	1,162	
June 1 breeding	7,315	7,075	
June-August			
Comm. sow slaughter	1,192	1,053	
Gilts added	709	793	
September 1 breeding	6,832	6,815	
September-November			
Comm. sow slaughter	1,105	970	
Gilts added	1,135	1,027	

1/ December previous year.

Table 11--Hogs and pigs balance sheet

Year	Dec. 1 inven-tory 1/	Dec.-May pig crop 1/	Total supply Dec.-May	Comm'l slaughter	Other disappear-ance 2/	June 1 inven-tory	June-Nov. pig crop	Total supply	Comm'l slaughter June-Nov.	Other disappear ance 2/
					1,000 head					
1975	54,693	35,530	90,223	37,854	4,509	47,860	35,656	83,516	31,666	2,583
1976	49,267	42,177	91,444	34,691	2,823	53,930	42,218	96,148	38,051	3,163
1977	54,934	42,960	97,894	39,435	3,999	54,460	43,202	97,662	38,219	2,904
1978	56,539	42,481	99,020	38,947	4,833	55,240	46,031	101,271	38,462	2,453
1979	60,356	50,551	110,907	41,217	4,617	65,020	52,241	117,261	46,627	3,316
1980	67,318	52,288	119,606	49,294	5,057	65,255	49,432	114,687	46,216	4,009
1981	64,462	47,605	112,067	47,503	4,824	59,740	46,248	105,988	43,991	3,299
1982	58,698	41,575	100,273	43,938	4,075	52,260	43,614	95,874	39,646	1,694
1983	54,534	47,409	101,943	41,516	2,482	57,945	45,785	103,726	45,146	1,886
1984	56,694	42,403	99,097	44,147	2,135	52,815	44,183	96,998	41,840	1,085
1985	54,073	42,546	96,619	42,814	1,555	52,250	43,490	95,740	41,771	1,655
1986	52,314	40,445	92,759	41,519	2,365	48,875	42,126	91,001	38,183	1,719
1987	51,001	43,496	94,497	39,486	2,590	52,200	44,927	97,127	40,577	1,817
1988	54,384	46,883	101,267	43,148	1,934	56,185	46,000	102,185	44,514	2,202
1989	55,469	47,238	102,707	44,684	2,143	55,880	44,836	100,716	44,719	2,176
1990	53,821	45,307	99,128	43,046	2,232	53,850	44,780	98,630	41,948	2,120
1991	54,562	45,215 3/	99,777							

1/ December previous year. 2/ Includes imports, exports, death loss, farm slaughter, etc. 3/ Based on farrowing intentions.

Table 12--Federally inspected hog slaughter

Week ended 1/	1987	1988	1989	1990
		Thousands		
Jan.				
6	1,683	1,726	1,419	1,337
13	1,659	1,766	1,719	1,763
20	1,527	1,605	1,679	1,674
27	1,500	1,543	1,647	1,684
Feb.				
3	1,455	1,535	1,631	1,647
10	1,502	1,545	1,656	1,656
17	1,395	1,542	1,678	1,677
24	1,533	1,595	1,665	1,624
Mar.				
3	1,556	1,610	1,621	1,713
10	1,578	1,674	1,716	1,605
17	1,574	1,639	1,703	1,707
24	1,504	1,631	1,601	1,631
31	1,529	1,599	1,648	1,578
Apr.				
7	1,553	1,573	1,761	1,661
14	1,468	1,655	1,780	1,642
21	1,393	1,660	1,813	1,594
28	1,453	1,695	1,764	1,594
May				
5	1,475	1,654	1,732	1,579
12	1,440	1,634	1,654	1,586
19	1,448	1,577	1,632	1,528
26	1,232	1,533	1,618	1,523
June				
2	1,385	1,323	1,343	1,236
9	1,372	1,489	1,589	1,460
16	1,341	1,513	1,589	1,452
23	1,356	1,503	1,533	1,472
30	1,193	1,537	1,500	1,402
July				
7	1,360	1,330	1,244	1,191
14	1,345	1,537	1,557	1,461
21	1,354	1,542	1,518	1,430
28	1,334	1,456	1,501	1,361
Aug.				
4	1,372	1,528	1,543	1,463
11	1,445	1,571	1,612	1,471
18	1,404	1,513	1,615	1,607
25	1,475	1,563	1,610	1,606
Sept.				
1	1,548	1,607	1,713	1,641
8	1,363	1,517	1,545	1,440
15	1,671	1,807	1,888	1,747
22	1,621	1,868	1,853	1,722
29	1,658	1,803	1,785	1,676
Oct.				
6	1,640	1,830	1,810	1,695
13	1,720	1,838	1,810	1,628
20	1,664	1,845	1,797	1,665
27	1,763	1,895	1,739	1,624
Nov.				
3	1,792	1,908	1,812	1,662
10	1,778	1,827	1,791	1,760
17	1,772	1,920	1,901	1,768
24	1,463	1,562	1,564	1,480
Dec.				
1	1,845	1,956	1,908	1,841
8	1,879	1,887	1,832	1,814
15	1,729	1,800	1,716	1,825
22	1,150	1,668	1,521	1,763
29	1,458	1,420	1,443	1,252

1/ Corresponding dates to 1990: 1987, Jan. 10; 1988, Jan. 9; 1989, Jan. 7.

Table 13--Pork: Retail, wholesale, and farm values, spreads, and farmers' share

Year	Retail price 1/	Wholesale value 2/	Gross farm value 3/	By-product allowance 4/	Net farm value 5/	Farm retail spread: Total	Farm retail spread: Wholesale-retail	Farm retail spread: Farm-wholesale	Farmers' share 6/
	Cents per pound								Percent
1985	162.0	101.1	76.2	4.8	71.4	90.6	60.9	29.7	44
1986	178.4	110.9	87.3	4.9	82.4	96.0	67.5	28.5	46
1987	188.4	113.0	87.9	5.2	82.7	105.7	75.4	30.3	44
1988	183.4	101.0	73.8	4.6	69.4	114.0	82.4	31.6	38
I	183.9	104.3	76.4	4.6	71.8	112.1	79.6	32.5	39
II	184.8	105.1	78.0	4.6	73.4	111.4	79.7	31.7	40
III	185.9	99.5	75.0	4.6	70.4	115.5	86.4	29.1	38
IV	179.0	95.3	66.2	4.0	62.2	116.8	83.7	33.1	35
1989	182.9	99.2	75.0	4.6	70.4	112.5	83.7	28.8	38
I	180.0	92.9	69.4	4.3	65.1	114.9	87.1	27.8	36
II	178.6	94.6	71.5	4.4	67.1	111.5	84.0	27.5	38
III	183.9	100.8	78.2	4.8	73.4	110.5	83.1	27.4	40
IV	188.9	108.4	80.8	4.7	76.1	112.8	80.5	32.3	40
1990									
Jan.	195.1	104.8	81.5	4.9	76.6	118.5	90.3	28.2	39
Feb.	196.5	105.6	83.4	5.0	78.4	118.1	90.9	27.2	40
Mar.	197.0	110.9	88.5	5.2	83.3	113.7	86.1	27.6	42
I	196.2	107.1	84.5	5.1	79.4	116.8	89.1	27.7	40
Apr.	200.9	114.8	91.6	5.5	86.1	114.8	86.1	28.7	43
May	206.2	127.2	105.7	6.2	99.5	106.7	79.0	27.7	48
June	218.1	125.6	103.1	6.2	96.9	121.2	92.5	28.7	44
II	208.4	122.5	100.2	6.0	94.2	114.2	85.9	28.3	45
July	222.2	127.3	105.4	6.2	99.2	123.0	94.9	28.1	45
Aug.	224.9	120.5	96.2	5.8	90.4	134.5	104.4	30.1	40
Sept.	220.8	120.7	93.4	5.4	88.0	132.8	100.1	32.7	40
III	222.6	122.8	98.3	5.8	92.5	130.1	99.8	30.3	42
Oct.	223.2	124.4	96.7	5.5	91.2	132.0	98.8	33.2	41
Nov.	222.9	119.7	84.0	4.9	79.1	143.8	103.2	40.6	35
Dec.	223.2	117.5	82.0	4.7	77.3	145.9	105.7	40.2	35
IV	223.1	120.5	87.5	5.0	82.5	140.6	102.6	38.0	37
Year	212.6	118.3	92.7	5.5	87.2	125.4	94.3	31.1	41

1/ Estimated weighted-average of BLS prices of retail cuts from pork carcass. 2/ Value of wholesale quantity equivalent to 1 lb of retail cuts. A wholesale-carcass equivalent of 1.06 is used. 3/ Market values to producer for 1.7 lb of live animal, equivalent to 1 lb of retail cuts. 4/ Portion of gross farm value attributable to edible and inedible by-products. 5/ Gross farm value minus by-product allowance. 6/ Percent net farm value is of retail price.

Fewer, But Larger Hog Operations

In 1990, the number of hog operations in the United States declined to 278,040, down 9 percent from 1989. Less than 100,000 operations now account for about 94 percent of the hog inventory. Ever more dramatic, less than 11,000 operations account for 42 percent of the inventory. These numbers reflect long-term trends and economies of size.

U.S. Pork Trade

U.S. Pork Imports for 1990 To Exceed 1989

U.S. pork imports for January-October were 760 million pounds, almost equal to imports during the first ten months of 1989. Imports from all major sources increased more rapidly towards the end of the period. Shipments from Denmark and Netherlands exceeded 1989 by 36 and 9 percent, respectively. Although still below 1989 levels, imports from Canada and Eastern Europe showed signs of recovery. Imports from Poland and Yugoslavia remained well below historic levels, but shipments from Hungary increased 22 percent. Total pork imports for 1990 will be about 925 million pounds, 3 percent above 1989.

Several factors have helped limit the growth in 1990 pork imports. European Community producers who reacted cautiously to higher prices early in the year were justified as

Table 14--U.S. live hogs trade 1/

Country	Annual 1989	January - October 1989	January - October 1990	Percent change
	1,000 head			Percent
Imports				
Canada	1073.2	922.9	756.8	-18.0
(Under 110 lb)	169.4	142.8	173.2	21.3
Total	1073.6	923.4	760.2	-17.7
Exports				
Mexico	78.1	68.3	32.9	-51.9
Other	15.2	12.7	10.4	-18.0
Total	93.3	81.0	43.3	-46.5

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

Table 15--U.S. pork trade, carcass weight 1/

Country or area	Annual 1989	January - October 1989	January - October 1990	Percent change
	Million pounds			Percent
Imports				
Canada	453.2	383.5	370.8	-3.3
Denmark	198.4	167.3	228.2	36.4
Poland	112.8	98.8	58.6	-40.7
Hungary	26.2	22.5	27.7	23.0
Other	105.1	90.1	74.7	-17.0
Total	895.7	762.2	760.0	-0.3
Exports				
Japan	147.8	119.3	104.5	-12.3
Canada	13.0	10.9	18.0	65.4
Mexico	60.2	52.6	27.6	-47.5
Caribbean	15.0	10.7	11.2	4.0
Other	26.5	19.0	31.8	67.4
Total	262.4	212.5	193.2	-9.1

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

prices plummeted later. Danish pork prices fell in the second half of the year to their lowest levels in almost a decade. Although previous Danish censuses indicated that producers had retained breeding animals, the August Danish census indicated no increase in market hog numbers. All weight classes were 2 percent below a year ago, while under-20-kilogram pigs were only one-half percent lower. Little increase in Danish pork production is expected before mid-1991.

Pork imports from Canada totaled 371 million pounds in the first 10 months. High U.S prices in the second and third quarters increased imports of Canadian pork, but slaughter through early December remained 5 percent below 1989. However, federally inspected slaughter in Alberta during that period was 20 percent higher as the sector recovered from labor disruptions in early 1989, while exports of live animals from that province declined by 30 percent.

Total pork imports for 1991 are expected to increase only 5 percent, to about 965 million pounds. Imports from Denmark should recover to historic levels later in the year. Canadian shipments are not expected to show dramatic growth. A shift in the relative values of either countervailing duty might alter the proportion of Canadian pork imported as live hogs versus product. Imports of pork from Poland and Eastern Europe will most likely remain low in 1991, but there is some potential for growth later in the year.

Live Hog Imports Down but Feeder Pig Shipments Continue To Increase

Live hog imports from Canada were about 760,000 head during January-October, 18 percent below 1989. All the decline was in slaughter hogs from Alberta and Saskatchewan and averaged 26 percent below last year. The number of imported pigs weighing less than 50 kilograms (110 pounds) increased over 20 percent, to 173,000 head. Approximately 23 percent of total hog imports through October 1990 are lighter-weight hogs, up from 16 percent for the same period in 1989.

Pork Exports Continue To Decline

U.S. pork exports to Japan for the first 10 months of 1990 were 105 million pounds, 12 percent below January-October 1989. Exports to Mexico increased slightly later in the year but remained almost 50 percent below January-October 1989. Although exports to Canada have increased 65 percent over last year, much of this growth has been the result of statistical changes as the U.S., in accordance with the Free Trade Agreement, began using Canadian import data to track U.S. exports to that country. Total exports for 1990 are expected to be less than 230 million pounds, about 13 percent below 1989.

Figure 2
Monthly Live Hog Imports From Canada

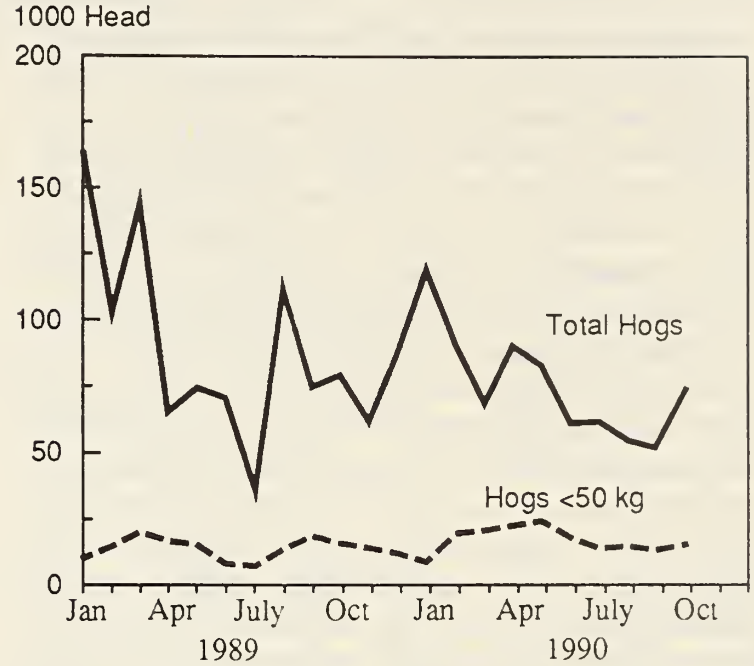
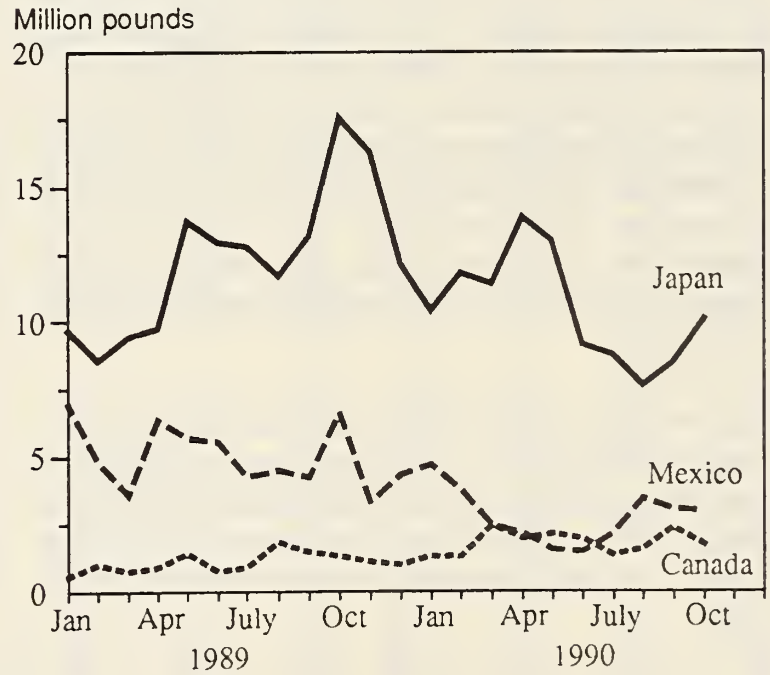


Figure 3
Monthly Pork Exports To Major Destinations



Given the low level of U.S. exports in 1990 and improved prospects for Japanese imports, exports in 1991 could increase to 255 million pounds. Although Taiwanese production and exports are forecast to decline in 1991, the possibility of increased production in Denmark in the later part of the year could pressure U.S. exports to Japan.

U.S. Commerce Department Reassesses Canadian Pork Countervailing Duty

In response to the Binational Dispute Settlement Panel's remand of the countervailing duty calculation for fresh, chilled, and frozen pork imports from Canada, the U.S. Department of Commerce (USDOC) upheld its calculation of the duty. However, it altered its calculation and, hence, the level of duty deposit. In September 1989, the Panel remanded 6 programs (including the Tripartite Stabilization Program) for further study. With respect to the tripartite program, the question had arisen as to whether the program for pork was differentiable from other tripartite programs and therefore countervailable. The Canadians claimed that the tripartite agreement program is not limited to specific commodities and could not be included in countervailing duty calculations. In its ruling, the Panel requested USDOC develop a test to determine the proportion of the sector aided by programs, the availability of alternative assistance, and the economic condition of the sector in the absence of the program.

In early December, the USDOC responded that several facets of the test desired by the Panel could not be achieved within the time constraints set forth and given the available resources. As a result of the tests Commerce did perform, it concluded that the tripartite program was countervailable. Commerce did allow that the full value of payments to hog producers do not convey to pork and set 95 percent as the conversion for duty calculation. In addition, Commerce dropped two programs from its payment base. As a result, the duty deposit was reduced from 8 Canadian cents per kilogram to 6.6 cents.

This returns the CVD issue to the Binational Panel for further consideration. The Panel is still considering a Canadian appeal to the U.S. International Trade Commission in response to an earlier remand on threat of injury. A ruling in that case is expected by January 22, 1991.

Cattle

Beef production in 1991 is expected to return to 1989 levels following a 1.5 percent decline in 1990. Cattle and beef prices rose to record levels in 1990 due to lower beef supplies as cow slaughter continued to decline and fed beef production remained below expectations for much of the year. Record U.S. cattle prices and fewer trade limitations within North America resulted in sharp increases in imports of feeder cattle from Canada and Mexico, and slaughter cattle from Canada.

The quarterly 13-State *Cattle on Feed* report to be released on January 25 and the January *Cattle* inventory report scheduled for February 4 will update information for 1991 forecasts to be presented in the February *Livestock and Poultry Situation and Outlook.*

1990 Slaughter Declines, Weights Rise

Commercial beef production in 1990 declined about 1.5 percent as a 4 pound rise in dressed weights partially offset a 2-percent decline in commercial cattle slaughter. Cow slaughter declined 7 percent as producers continued to set the tone for moderate expansion. Beef and dairy cow slaughter both declined, with the largest drop occurring in dairy cows. In spite of cattle-on-feed inventories above year-earlier levels throughout 1990, steer and heifer slaughter declined 1 percent from 1989. The fed cattle proportion of slaughter continued to rise and, with heavy steer slaughter weights and rising heifer weights, fed beef production likely rose in 1990. In addition, many of the increased number of Canadian imports were fed cattle. Increased beef exports to Canada partially offset the increased fed cattle imports.

Beef production is expected to rise nearly 2 percent in 1991, as fed cattle marketings increase. Cow slaughter is expected to remain near the lower 1990 level, with beef cow slaughter declining and dairy cow slaughter rising, particularly in second-half 1991. Slaughter weights are likely to remain near or slightly above the year-earlier weight of 681 pounds. Lower grain prices and tight feeder cattle supplies are expected to encourage feedlot placements at somewhat lighter weights. This will likely lead to a leveling off of marketing weights.

Fed Cattle Inventories Large; Marketings Uncertain

Cattle on feed in the 7 monthly reporting States on December 1 were 10 percent above a year ago—the largest for this date since 1978. Cattle placed on feed in these States in November were slightly above the large, year-earlier level and the third largest on record. Fed cattle slaughter is expected to rise well above year-earlier levels through the winter, as the sizeable second-half 1990 placements are marketed. Expanding cattle slaughter is already resulting in price declines from the December $80.88 record. Although feedlots remained current at year end, slaughter weights continue near record levels. However, marketing backups are not expected to become a problem since domestic and export demand continue favorable. Winter weather extremes in the major cattle feeding areas could slow weight gains, partially offsetting the impact of larger feedlot inventories.

Prices Continue Record Pace

Price of Choice beef at retail in November and December moved above $2.90 a pound, and well above the $2.84 record set in May. Similarly, fed cattle and boxed beef prices also set records in November and continued the

record-setting pace in December, as steer and heifer slaughter, and thus fed beef production, remained below expectations. Weekly cattle slaughter began to rise in mid-December, again reaching and finally exceeding the 620,000 to 630,000 head of early October. Preliminary slaughter levels in the first two full weeks of January ranged from 650,000 to 660,000 head. Cattle and boxed beef prices declined through mid-January as expectations for increased slaughter began to be realized and with confirmation of economic concerns. Choice fed steer prices at Omaha declined

Text continued on page 18.

Table 16--Federally inspected cattle slaughter

Week ended	Cattle 1988	Cattle 1989	Cattle 1990	Steers 1988	Steers 1989	Steers 1990	Cows Total 1988	Cows Total 1989	Cows Total 1990	Cows Dairy 1988	Cows Dairy 1989	Cows Dairy 1990	Dairy/total 1988	Dairy/total 1989	Dairy/total 1990
	Thousands												Percent		
Jan.															
6	664	543	548	328	256	263	131	119	120	64	64	57	49	54	48
13	723	627	622	359	290	282	126	131	147	62	68	69	49	52	47
20	703	654	599	353	313	281	126	129	132	60	65	61	48	50	46
27	675	641	637	340	310	318	119	123	119	57	61	59	48	50	50
Feb.															
3	646	625	638	335	300	309	116	114	122	58	60	60	50	53	49
10	639	605	622	332	300	304	106	104	115	55	57	60	52	55	52
17	637	641	601	316	316	300	118	119	102	59	64	53	50	54	52
24	640	628	594	314	309	300	121	108	104	60	62	56	49	57	54
Mar.															
3	616	639	592	304	316	295	114	114	109	56	62	56	49	54	51
10	609	600	613	298	312	312	105	104	103	54	58	55	52	56	53
17	622	588	621	307	288	315	106	119	104	54	61	57	51	51	55
24	607	584	609	304	286	306	108	114	110	53	56	56	49	49	51
31	617	587	608	316	286	307	106	111	108	51	57	55	48	51	51
Apr.															
7	600	609	592	310	300	302	101	118	105	50	57	51	50	48	49
14	619	646	595	315	335	303	110	117	104	54	56	50	49	48	48
21	670	663	627	349	332	326	108	122	102	50	56	48	46	46	47
28	674	652	625	356	332	325	109	122	109	50	54	51	46	44	47
May															
5	664	666	617	358	326	322	104	128	102	46	56	49	44	44	48
12	664	670	684	344	339	352	109	118	105	47	50	48	43	43	46
19	682	675	681	348	344	354	118	115	112	48	50	49	41	44	44
26	689	673	667	355	342	347	125	115	109	52	50	47	42	44	43
June															
2	575	589	592	298	301	311	96	99	91	39	42	39	41	43	43
9	681	663	665	336	328	339	120	114	104	50	49	44	42	43	42
16	678	680	674	338	339	349	129	113	101	53	49	41	41	43	41
23	678	658	662	344	331	341	120	109	103	50	48	45	42	44	44
30	682	671	664	348	329	340	119	112	108	50	50	44	42	44	41
July															
7	609	564	555	306	288	289	108	79	77	51	37	33	48	47	43
14	724	691	671	341	335	339	135	122	113	62	56	48	46	46	42
21	691	672	673	359	326	334	116	115	106	55	55	45	47	48	42
28	694	638	647	346	312	333	112	106	95	57	52	44	51	49	46
Aug.															
4	678	644	617	339	326	322	111	104	96	54	53	44	49	51	46
11	694	673	646	346	332	332	112	107	98	56	54	47	50	50	48
18	688	652	646	337	315	326	115	112	104	54	53	48	47	47	46
25	678	630	634	328	304	319	121	114	108	58	56	50	48	49	46
Sept															
1	703	646	636	326	316	311	116	111	109	55	57	53	47	51	49
8	614	562	572	288	277	287	101	97	93	49	49	44	49	51	47
15	692	657	662	333	327	323	124	118	113	58	58	55	47	49	49
22	672	666	643	332	316	301	119	117	112	58	56	51	49	48	46
29	667	670	656	316	324	324	118	120	112	58	56	51	49	46	46
Oct.															
6	674	660	625	309	310	285	125	126	111	56	57	53	46	45	48
13	680	663	635	311	309	306	127	128	118	56	57	53	44	45	45
20	673	648	627	312	304	298	132	132	126	58	57	55	44	43	44
27	676	652	621	310	297	299	143	142	131	64	60	56	45	42	43
Nov.															
3	656	643	644	304	292	299	140	139	134	62	61	56	44	44	42
10	621	630	600	298	292	282	134	139	130	62	59	58	46	42	45
17	623	635	610	286	292	285	140	143	127	63	60	54	45	42	43
24	546	533	548	260	262	284	110	111	101	51	47	43	46	42	43
Dec.															
1	648	660	602	298	301	296	145	146	129	67	62	57	46	43	44
8	624	644	597	300	299	294	140	149	130	66	63	57	47	42	44
15	623	635	638	306	304	319	126	133	128	62	58	59	50	44	46
22	622	625	635	305	298	316	116	124	120	58	53	57	50	43	48
29	549	542	426	281	274	219	90	99	74	46	42	33	51	42	45

1/ Corresponding dates to 1990: 1988, Jan. 9, 1989, Jan. 7.

Table 17--Calf slaughter by class under Federal inspection

Year	Bob veal 150 lb & below	Fed Formula 150-400 lb	Fed Nonformula 150-400 lb	Other over 400 lb	Total
	1,000 head				
1986	1,618.6	1,009.3	285.9	281.0	3,194.8
1987	1,207.8	1,002.7	171.4	297.5	2,679.4
1988					
Jan.	92.5	82.0	12.5	18.1	205.1
Feb.	86.5	84.9	16.2	15.2	202.8
Mar.	96.3	92.8	11.4	15.3	215.8
Apr.	65.3	78.7	10.8	14.3	169.1
May	58.1	80.7	17.1	15.4	171.3
Jun.	82.1	90.4	14.2	17.1	203.8
July	106.3	74.2	14.1	12.4	207.0
Aug.	111.7	86.3	12.2	16.7	226.9
Sept.	92.7	85.0	13.1	16.5	207.3
Oct.	84.6	84.7	11.9	15.8	197.0
Nov.	94.7	81.4	11.3	14.1	201.5
Dec.	95.1	82.2	11.1	14.2	202.6
Year	1,065.9	1,003.3	155.9	185.1	2,410.2
1989					
Jan.	83.4	83.6	10.3	18.3	195.6
Feb.	75.7	76.6	7.7	15.3	175.3
Mar.	83.1	84.6	9.9	16.7	194.3
Apr.	46.3	74.5	7.3	23.9	152.0
May	54.7	77.9	9.3	15.4	157.3
June	56.4	81.6	8.1	15.1	161.2
July	97.1	82.8	10.3	16.6	206.8
Aug.	87.8	76.1	8.3	16.9	189.1
Sept.	77.3	68.4	10.6	16.7	173.0
Oct.	80.6	86.7	11.2	12.2	190.7
Nov.	81.6	70.5	10.5	12.4	175.0
Dec.	74.2	70.5	8.9	13.3	166.9
Year	898.2	933.8	112.4	192.8	2,137.2
1990					
Jan.	73.4	77.5	12.1	11.8	174.8
Feb.	58.0	66.1	8.1	12.9	145.1
Mar.	66.4	79.6	8.1	11.0	165.1
Apr.	42.8	67.3	8.2	9.4	127.7
May	38.9	81.7	7.3	8.9	136.8
June	41.4	69.1	9.9	11.2	131.6
July	53.7	69.0	6.5	9.5	138.7
Aug.	56.6	68.8	9.0	12.5	146.9
Sept.	51.5	60.4	7.2	13.2	132.3
Oct.	57.0	77.3	9.3	14.1	157.7
Nov.	59.5	71.3	7.6	10.7	149.1

Table 18--7-States cattle on feed, placements, and marketings

Year	On feed	Percent change 1/	Net placements	Percent change 1/	Marketings	Percent change 1/	Other disappearance	Percent change 1/
	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent
1988								
Jan.	8,411	5.8	1,557	7.1	1,764	-1.6	106	-16.5
Feb.	8,204	7.7	1,253	-6.3	1,545	4.5	126	20.0
Mar.	7,912	5.9	1,737	6.9	1,593	1.4	111	18.1
Apr.	8,056	7.0	1,382	-11.5	1,609	4.4	139	0.0
May	7,829	3.7	2,029	10.2	1,724	13.9	146	2.1
June	8,134	3.3	1,319	-1.9	1,717	-0.9	68	-21.8
July	7,736	3.3	1,189	-2.4	1,785	3.6	62	-12.7
Aug.	7,140	2.2	1,594	-13.7	1,790	3.3	66	-2.9
Sept.	6,944	-2.2	2,142	-10.9	1,682	0.7	67	-5.6
Oct.	7,404	-5.4	2,366	-6.4	1,576	-7.3	84	-1.2
Nov.	8,194	-5.4	1,578	0.4	1,517	2.6	112	3.7
Dec.	8,255	-5.7	1,306	2.8	1,516	-6.0	115	-3.4
1989								
Jan.	8,045	-4.4	1,602	2.9	1,677	-4.9	104	-1.9
Feb.	7,970	-2.9	1,495	19.3	1,534	-0.7	115	-8.7
Mar.	7,931	0.2	1,900	9.4	1,579	-0.9	75	-32.4
Apr.	8,252	2.4	1,415	2.4	1,580	-1.8	124	-10.8
May	8,087	3.3	1,460	-28.0	1,752	1.6	164	12.3
June	7,795	-4.2	1,231	-6.7	1,791	4.3	62	-8.8
July	7,235	-6.5	1,228	3.3	1,700	-4.8	63	1.6
Aug.	6,763	-5.3	1,562	-2.0	1,694	-5.4	76	15.2
Sept.	6,631	-4.5	1,906	-11.0	1,579	-6.1	47	-29.9
Oct.	6,958	-6.0	2,581	9.1	1,628	3.3	71	-15.5
Nov.	7,911	-3.5	1,910	21.0	1,490	-1.8	91	-18.8
Dec.	8,331	0.9	1,465	12.2	1,418	-6.5	87	-24.3
1990								
Jan.	8,378	4.1	1,782	11.2	1,634	-2.6	114	9.6
Feb.	8,526	7.0	1,308	-12.5	1,515	-1.2	95	-17.4
Mar.	8,319	4.9	1,782	-6.2	1,618	2.5	120	60.0
Apr.	8,483	2.8	1,252	-11.5	1,554	-1.6	125	0.8
May	8,181	1.2	1,482	1.5	1,796	2.5	150	-8.5
June	7,867	0.9	1,267	2.9	1,824	1.8	73	17.7
July	7,310	1.0	1,443	17.5	1,750	2.9	77	22.2
Aug.	7,003	3.5	1,653	5.8	1,666	-1.7	82	7.9
Sept.	6,990	5.4	2,135	12.0	1,445	-8.5	79	68.1
Oct.	7,680	10.4	2,664	3.2	1,605	-1.4	87	22.5
Nov.	8,739	10.5	1,912	0.1	1,512	1.5	95	4.4
Dec.	9,139	9.7						

1/ Percent change is from previous year.

Table 19--Beef, Choice Yield Grade 3: Retail, wholesale, and farm values, spreads, and farmers' share 1/

Year	Retail price 2/	Wholesale value 3/	Gross farm value 4/	By-product allowance 5/	Net farm value 6/	Farm retail-spread Total	Farm retail-spread Wholesale-retail	Farm retail-spread Farm wholesale	Farmers' Share 7/
	Cents per pound								Percent
1985	228.6	148.8	142.2	14.8	127.4	101.2	79.8	21.4	56
1986	226.8	146.5	140.0	15.0	125.0	101.8	80.3	21.5	55
1987	238.4	160.0	157.6	18.9	138.7	99.7	78.4	21.3	58
1988	250.3	169.4	169.4	21.1	148.3	102.0	80.9	21.1	59
I	241.7	164.1	166.0	22.3	143.7	98.0	77.6	20.4	59
II	250.1	176.6	176.2	22.2	154.0	96.1	73.5	22.6	62
III	254.5	164.7	163.8	20.7	143.1	111.4	89.8	21.6	56
IV	255.0	172.3	171.4	19.2	152.2	102.8	82.7	20.1	60
1989	265.7	176.8	177.6	20.0	157.6	108.1	88.9	19.2	59
I	260.7	177.3	179.6	19.7	159.9	100.8	83.4	17.4	61
II	267.0	180.4	179.5	19.3	160.2	106.8	86.6	20.2	60
III	268.0	172.5	171.3	20.1	151.2	116.8	95.5	21.3	56
IV	266.9	176.8	180.1	21.2	158.9	108.0	90.1	17.9	60
1990									
Jan.	274.4	187.1	189.4	21.8	167.6	106.8	87.3	19.5	61
Feb.	271.0	186.0	188.7	21.5	167.2	103.8	85.0	18.8	62
Mar.	272.5	187.7	190.4	21.1	169.3	103.2	84.8	18.4	62
I	272.6	186.9	189.5	21.5	168.0	104.6	85.7	18.9	62
Apr.	277.9	190.1	192.0	21.2	170.8	107.1	87.8	19.3	61
May	283.6	191.6	187.9	20.7	167.2	116.4	92.0	24.4	59
June	282.1	187.8	184.2	20.3	163.9	118.2	94.3	23.9	58
II	281.2	189.8	188.0	20.7	167.3	113.9	91.4	22.5	59
July	279.9	183.3	180.6	20.1	160.5	119.4	96.6	22.8	57
Aug.	280.6	187.8	186.6	19.9	166.7	113.9	92.8	21.1	59
Sept.	180.6	187.3	186.8	20.0	166.8	113.8	93.3	20.5	59
III	280.4	186.1	184.6	20.0	164.6	115.8	94.3	21.5	58
Oct.	282.7	193.0	190.8	19.7	171.1	111.6	89.7	21.9	61
Nov.	291.6	198.5	194.5	19.7	174.8	116.8	93.1	23.7	60
Dec.	295.3	200.2	194.8	20.0	174.8	120.5	95.1	25.4	59
IV	289.9	197.2	193.4	19.8	173.6	116.3	92.7	23.6	60
Year	281.0	190.0	188.9	20.5	168.4	112.6	91.0	21.6	60

1/ Series revised August 1990. 2/ Estimated weighted-average of BLS prices of retail cuts from Choice Yield Grade 3 carcass. 3/ Value of wholesale quantity equivalent to 1 lb of retail cuts. A wholesale equivalent of 1.142 is used. 4/ Market value to producer for 2.4 lb of live animal, equivalent to 1 lb of retail cuts. 5/ Portion of gross farm value attributed to edible and inedible by-products. 6/ Gross farm value minus farm by-product allowance. 7/ Percent net farm value is of retail price.

Table 20--Great Plains custom cattle feeding: Selected costs at current rates 1/

Purchased During 1989-90 Marketed During 1990-91	Jan. July	Feb. Aug.	Mar. Sept.	Apr. Oct.	May Nov.	June Dec.	July Jan.	Aug. Feb.	Sept. Mar.	Oct. Apr.	Nov. May	Dec. June
Expenses: ($/head)												
600 lb. feeder steer	500.70	504.78	516.78	515.28	523.80	525.78	536.64	564.60	545.28	540.00	539.28	552.00
Transportation to feedlot (300 miles)	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96
Commission	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Feed												
Milo (1500 lb) 2/	62.55	62.70	64.20	67.80	72.15	72.45	74.85	69.45	67.05	64.95	66.45	70.05
Corn (1500 lb) 2/	72.75	73.50	76.35	81.45	85.50	85.65	82.35	78.00	70.95	69.75	71.55	73.20
Cotton seed meal (400 lb)	54.40	54.40	54.40	63.60	63.60	63.60	52.40	52.40	52.40	53.60	53.60	53.60
Alfalfa hay (800 lb) 3/	53.20	52.00	56.00	48.40	56.80	51.20	58.00	59.20	50.00	53.60	55.60	56.40
Total feed cost	242.90	242.60	250.95	261.25	278.05	272.90	267.60	259.05	240.40	241.90	247.20	253.25
Feed handling and management charge	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Vet medicine	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Interest on feeder and 1/2 feed	37.64	37.88	38.86	38.75	39.77	39.73	40.23	41.65	39.93	39.66	39.77	40.72
Death loss (1.5% of purchase)	7.51	7.57	7.75	7.73	7.86	7.89	8.05	8.47	8.18	8.10	8.09	8.28
Marketing 4/	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.
Total	819.71	823.79	845.30	853.97	880.44	877.26	883.48	904.73	864.75	860.62	865.30	885.21
Selling price required to cover: 5/ $/cwt.												
Feed and feeder cost (1056 lb)	70.42	70.77	72.70	73.54	75.93	75.63	76.16	78.00	74.40	74.04	74.48	76.25
All costs	77.62	78.01	80.05	80.87	83.37	83.07	83.66	85.67	81.89	81.50	81.94	83.83
Selling price 6/	75.07	77.61	78.05	79.82	81.12	81.26						
Net margin	-2.55	-0.40	-2.00	-1.05	-2.25	-1.81						
Cost per 100 lb. gain:												
Variable cost less interest $/cwt.	54.88	54.83	56.54	58.60	61.98	60.96	59.93	58.30	54.52	54.80	55.86	57.11
Feed costs $/cwt.	48.58	48.52	50.19	52.25	55.61	54.58	53.52	51.81	48.08	48.38	49.44	50.65
Prices: ($/cwt)												
Choice feeder steer 600-700 lb. Amarillo	83.45	84.13	86.13	85.88	87.30	87.63	89.44	94.10	90.88	90.00	89.88	92.00
Transportation rate $/cwt/100 miles 7/	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Commission fee $/cwt.	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Feed, Prices, Texas												
Milo $/cwt	4.02	4.03	4.13	4.37	4.66	4.68	4.84	4.48	4.32	4.18	4.28	4.52
Corn $/cwt.	4.70	4.75	4.94	5.28	5.55	5.56	5.34	5.05	4.58	4.50	4.62	4.73
Cottonseed Meal (41%) $/cwt. 8/	13.60	13.60	13.60	15.90	15.90	15.90	13.10	13.10	13.10	13.40	13.40	13.40
Alfalfa hay $/ton	103.00	100.00	110.00	91.00	112.00	98.00	115.00	118.00	95.00	104.00	109.00	111.00
Feed handling and management $/ton	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Interest, annual rate 9/	12.10	12.10	12.10	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00

1/ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individual feedlots. For individual use, adjust expenses and prices for management, production, and locatlity of operation. Steers are assumend to gain 500 lb in 180 days at 2.8 lb per day with feed conversion of 8.4 lb per pound gain. 2/ Texas Panhandle elevatore price plus $.15/cwt handling and transportation to feedlots. 3/ Average price received by farmers plus $30/ton handling and transportation to feedlots. 4/ Most cattle sold f.o.b. at the feedlot with 4-percent shrink. 5/ Sale weight 1,056 lb (1,100 lb less 4-percent shrink). 6/ Choice slaughter steers, 900-1100 lb, Texas-New Mexico direct. 7/ Converted from cents per mile for a 44,000-lb haul. 8/ Average prices paid by farmers. 9/ Prime rate plus 2 points.

Table 21--Corn Belt cattle feeding: Selected costs at current rates 1/

Purchased During 1989-90 Marketing During 1990-91	Jan. Jul.	Feb. Aug.	Mar. Sept.	Apr. Oct.	May Nov.	Jun. Dec.	Jul. Jan.	Aug. Feb.	Sept. Mar.	Oct. Apr.	Nov. May	Dec. Jun.
Expenses: ($/head)												
600 lb. feeder steer	514.20	509.28	525.00	544.86	551.40	564.78	561.00	553.80	549.00	NA	556.50	556.02
Transportation to feedlot-400 miles	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28
Corn (45 bu.)	99.90	101.03	105.75	113.85	118.57	121.05	117.90	111.60	102.83	98.10	97.20	98.10
Silage (1.7 tons)	40.89	40.68	41.57	42.40	43.01	42.92	41.62	39.45	38.36	37.46	38.00	38.73
Protein supplement (270 lb.)	37.67	37.67	37.67	35.10	35.10	35.10	36.72	36.72	36.72	36.99	36.99	36.99
Hay (400 lb.)	15.70	15.40	15.40	14.90	14.70	14.30	13.80	13.10	13.50	13.50	14.00	14.40
Total feed costs	194.15	194.77	200.39	206.25	211.39	213.37	210.04	200.87	191.40	186.05	186.19	188.22
Labor (4 hrs.)	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72
Management (1 hr.) 2/	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86
Vet medicine 3/	5.86	5.86	5.86	5.92	5.92	5.92	5.95	5.95	5.95	6.07	6.07	6.07
Interest on purchase (6 months)	30.90	30.61	31.55	32.36	32.75	33.55	33.32	32.90	32.61	NA	33.03	33.00
Power, equip., fuel, shelter, deprec. 3/	27.31	27.31	27.31	27.62	27.62	27.62	27.73	27.73	27.73	28.30	28.30	28.30
Death loss (1% of purchase)	5.14	5.09	5.25	5.45	5.51	5.65	5.61	5.54	5.49	NA	5.57	5.56
Transportation (100 miles)	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31
Marketing expenses	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35
Miscellaneous and indirect costs 3/	11.81	11.81	11.81	11.94	11.94	11.94	11.99	11.99	11.99	12.24	12.24	12.24
Total	823.90	819.25	841.69	868.93	881.06	897.35	890.16	873.29	858.69	267.18	862.40	863.92
Selling price required to cover: ($/cwt.)												
Feed and feeder cost (1050 lb.)	67.46	67.05	69.08	71.53	72.65	74.11	73.43	71.87	70.51	NA	70.73	70.88
All costs (1050 lb.)	78.47	78.02	80.16	82.76	83.91	85.46	84.78	83.17	81.78	NA	82.13	82.28
Feed cost per 100 lb. gain (450 lb.)	43.15	43.28	44.53	45.83	46.98	47.42	46.68	44.64	42.53	41.35	41.37	41.83
Choice steers, Omaha (1000-1100 lb.)	74.46	76.22	75.75	77.50	79.93	80.88						
Net margin	-4.01	-1.80	-4.41	-5.26	-3.98	-4.58						
Prices:												
Feeder steer, Choice (600-700 lb.) Kansas City $/cwt.	85.70	84.88	87.50	90.81	91.90	94.13	93.50	92.30	91.50	NA	92.75	92.67
Corn $/bu. 4/	2.22	2.25	2.35	2.53	2.64	2.69	2.62	2.48	2.29	2.18	2.16	2.18
Hay $/ton 4/	78.50	77.00	77.00	74.50	73.50	71.50	69.00	65.50	67.50	67.50	70.00	72.00
Corn silage $/ton 5/	24.05	23.93	24.46	24.94	25.30	25.25	24.49	23.21	22.56	22.04	22.35	22.78
Protein supplement (32-36%) $/cwt. 6/	13.95	13.95	13.95	13.00	13.00	13.00	13.60	13.60	13.60	13.70	13.70	13.70
Farm labor $/hour	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93
Interest rate, annual	12.02	12.02	12.02	11.88	11.88	11.88	11.88	11.88	11.88	11.87	11.87	11.87
Transportation rate $/cwt. per 100 mile 7/	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Marketing expenses $/cwt. 8/	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35
Index of prices paid by farmers (1910-14=100)	1246	1246	1246	1260	1260	1260	1265	1265	1265	1291	1291	1291

1/ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individuals for management, production, and locality of operation. 2/ Assumes 1 hour at twice the labor rate. 3/ Adjusted quarterly by the index of prices paid by farmers for commodities, services, interest, taxes, and wage rates. 4/ Average price received by farmers in IA and IL. 5/ Price derived from an equivalent price of 5 bushels corn and 330 lb. hay. 6/ Average price paid by farmers in IA and IL. 7/ Converted from cents/mile for a 44,000-lb. haul. 8/ Yardage plus commission fees at a Midwest terminal market.

to $78.50 per cwt in mid January while boxed beef prices dropped below $124 per cwt, down about $7 from mid-December.

U.S. Beef and Cattle Trade

U.S. Beef and Veal Imports To Decline in 1991

U.S. beef and veal imports for January-October 1990 were up 8.5 percent from last year and for the entire year are likely to reach 2,330 million pounds, carcass weight. Imports in 1991 are forecast to decline 3 percent, to 2,270 million pounds. Reduced output in the major suppliers is the predominant reason for the decline.

For 1991, the trigger level for meat imports under the Meat Import Law has been set at 1,318.5 million pounds, product weight, only slightly below last year at 1,336.2 million pounds. The U.S. Meat Import Law covers imports of fresh, chilled, or frozen beef, veal, mutton, and goat meat. Imports of quota meats are not expected to exceed the trigger level (which is 10 percent above the quota level) during 1991.

The Meat Import Law includes production and countercyclical factors in the formula to determine the import quota. Estimates of meat imports under the law are made 4 times a year. If it appears that imports may exceed the trigger level, negotiations with the major suppliers may be conducted to arrive at a voluntary restraint agreement (VRA). The major suppliers (Australia and New Zealand) have agreed in recent years to voluntarily restrain the level of imports to below the trigger level so that the more restrictive quota level will not be enforced. Because of the U.S.-Canadian Free Trade Agreement, Canada has not been included under the Meat Import Law since the beginning of 1989.

The last year a VRA was negotiated was 1988. The last year a quota was imposed was 1979, when it was imposed, suspended, and VRAs were then negotiated above the trigger level.

About 86 percent of beef and veal imports are fresh, chilled, or frozen, and are covered under the meat import law. The remainder is cooked and shipped in sterile, air-tight containers. The major suppliers of this type of product are Argentina and Brazil which are not allowed to ship fresh, chilled, or frozen product because of hoof and mouth disease.

New Era for U.S. Beef and Veal Exports

U.S. beef and veal exports for January-October 1990 amounted to 829 million pounds, carcass weight, and are likely to reach 1,035 million pounds for the year. Exports are forecast to increase 2 percent in 1991, largely to Canada and South Korea. Events in Japan have great significance for U.S. exporters because about three-fourths of U.S. beef and veal exports are destined for the Japanese market.

Beginning in April 1991, Japanese beef imports will no longer be under a quota or regulated by Japan's Livestock Industry Promotion Corporation (LIPC). All LIPC surcharges will be eliminated; but the ad valorem import tariff on landed value including transportation cost will be increased from 25 percent to 70 percent in April 1991. The ad valorem tariff will be reduced to 60 percent beginning April 1992, and to 50 percent in April 1993.

The new freedom for direct contact between Japanese importers and foreign suppliers provides an opportunity for increasing trade, however, there will also be no guaranteed growth in a minimum import level. Price declines have not been passed on to Japanese consumers and, as a result, beef stock levels have remained high. Therefore, during the time the market is adjusting to the new conditions, little growth in imports is expected.

Record Live Cattle Imports in 1990

Total U.S. cattle imports are forecast at 2.2 million head in 1990. Through October 1990, imports are up 61 percent over the same period last year. While Mexico remains the major supplier of live cattle to the United States, record numbers are being imported from Canada.

Higher cattle prices in the United States, compared with similar markets in Canada, continue to attract Canadian cattle. With the forecasts indicating a continuing differential in prices, exports from Western Canada are likely to remain large.

Preliminary Canadian trade data for 1990 show exports of slaughter cattle to the United States at 454,512 head, up 18 percent from a year earlier. Canadian feeder cattle exports are 181,157 head, compared with 52,423 last year.

The USDA Animal and Plant Health Inspection Service reported that U.S. imports of cattle from Mexico, predominately feeder steers, reached 1,201,264 head for the period January 1-December 15, 1990, compared with 868,864 for the period January 1-December 19, 1989.

U.S. cattle exports declined in 1990, and are likely to reach only 115,000 head as U.S. prices remain at record levels as cattle numbers remain near cyclical lows. If credit programs with Mexico for cattle are announced for 1991, U.S. exports will increase.

Table 22--U.S. live cattle trade 1/

Country or area	Annual 1989	January - October 1989	January - October 1990	Percent change
	Thousand head			Percent
Imports				
Mexico	873.6	512.8	853.5	66.4
Canada	584.7	488.4	763.2	56.3
Other	1.1	1.1	0.0	-99.6
Total	1459.4	1002.3	1616.7	61.3
Exports				
Mexico	124.9	113.1	52.6	-53.5
Canada	23.7	16.9	21.9	29.5
Other	20.6	16.1	20.1	25.3
Total	169.1	146.1	94.7	-35.2

1/ May not add due to rounding. Percent change calculated from unrounded data.

Table 23--Imports of feeder cattle and calves and hogs from Canada and Mexico

Year	Feeder cattle and calves: Canada	Feeder cattle and calves: Mexico	Hogs: Canada
		Number	
1988			
May	44,319	32,816	51,366
June	41,631	5,043	62,137
July	25,098	0	53,360
Aug.	48,177	8	83,256
Sept.	56,200	0	104,310
Oct.	53,307	178	108,945
Nov.	56,006	4,184	106,901
Dec.	29,016	107,805	53,074
Total	476,707	841,285	835,125
1989			
Jan.	52,285	105,822	162,762
Feb.	34,515	146,996	103,245
Mar.	39,386	132,921	144,106
Apr.	46,410	108,428	65,383
May	61,756	9,401	74,488
June	58,534	233	70,821
July	19,379	3,429	35,796
Aug.	51,205	4,172	111,765
Sept.	50,484	716	74,946
Oct.	65,841	509	79,625
Nov.	54,132	132,404	61,972
Dec.	40,861	228,357	88,255
Total	573,408	873,388	1,073,164
1990			
Jan.	53,709	126,109	119,009
Feb.	68,728	117,738	91,116
Mar.	74,048	122,648	68,791
Apr.	87,155	125,692	90,417
May	90,785	117,799	83,125
June	79,724	71,359	61,262
July	46,664	46,070	61,829
Aug.	57,177	18,022	54,927
Sept.	89,126	39,229	52,186
Oct.	102,388	68,756	74,108

Table 24--U.S. beef and veal trade, carcass weight 1/

Country or area	Annual 1989	January - October 1989	January - October 1990	Percent change
	Million pounds			Percent
Imports				
Australia	818.4	633.5	879.9	38.9
New Zealand	658.4	610.3	502.4	-17.7
Canada	239.3	190.7	181.2	-5.0
Brazil	78.2	65.9	43.8	-33.6
Argentina	189.3	151.3	172.5	14.0
Central America	173.3	132.7	152.2	14.7
Other	18.5	18.1	23.5	30.0
Total	2175.4	1802.6	1955.6	8.5
Exports				
Japan	715.5	605.2	486.7	-19.6
Canada	98.2	80.9	155.6	92.4
Caribbean	22.6	18.0	20.1	11.6
Korea, S.	57.7	42.4	72.6	71.1
Other	128.5	108.4	94.1	-13.3
Total	1022.6	854.9	829.0	-3.0

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

Sheep and Lambs

Slaughter lamb prices at San Angelo, Texas, from July to early January continued to hover in the upper-$40 to lower-$50 range. Typically, lamb prices increase in late November and early December as a result of increased holiday demand. However, in early December, slaughter lamb prices reached their yearly low of $46. Prices rebounded to the lower $50's later in the month and averaged $49.60 during December. It appears that the lamb market has become saturated and consumers are unwilling to purchase additional production, except at greatly reduced prices. This consumer resistance should keep lamb prices at 1990 levels throughout 1991, given the ample supplies of competing meats.

First-quarter 1991 lamb prices are expected to increase near the end of the quarter, for the spring religious holidays that occur in late March. Slaughter lamb prices at San Angelo are expected to average $55 to $59 per cwt. Second-quarter prices are expected to average $58 to $62, then drop to the low $50's for the remainder of the year.

Fourth-quarter 1990 lamb and mutton production is estimated at 91 million pounds, down about 1 percent from 1989. Production for all of 1990 was 359 million pounds, up 5 percent for the year. Lamb and mutton production for 1991 is expected to be about 363 million pounds, up a little over 1 percent. First-quarter 1991 production is expected to be about 95 million pounds, 2 percent above a year ago. Typically, lamb production is geared up to meet the spring religious holiday demand. Second-quarter production is expected to be about 88 million pounds, down about 2 percent from 1990.

Poultry and Eggs

Broilers

Production Increases Continue

Producers continue to increase production in response to the sustained profitability of the past several years. Broiler production rose about 7 percent in 1990, and is expected to grow another 5 percent in 1991. Fourth-quarter production was about 8 percent above year-earlier levels, reflecting increased slaughter weights and placements. The November-December broiler chick hatch, along with expectations of continued heavier slaughter weights relative to 1990, indicates a 5-6 percent increase in first-quarter 1991 production, compared with nearly 9 percent a year earlier.

Total broiler production reached a record 18.6 billion pounds in 1990. Exports were a record 1.1 billion pounds, reflecting large sales to traditional major markets such as Japan and the additional large sales to the Soviet Union, which became the largest export market in 1990. Consumption continues to grow, reflecting consumer response to attractive broiler products and prices. Per capita consumption in 1990 was about 70 pounds, 3 pounds more than in 1989. Per capita consumption for 1991 is expected to be around 73 pounds.

Table 25--Broiler chicks hatched and pullet chicks placed in hatchery supply flocks, 1988-91

Month	Broiler-type chicks			Pullet chicks placed in broiler hatchery supply flocks					
				Monthly placements			Cumulative placements 1/		
	1988	1989	1990	1988	1989	1990	1989	1990	1991
	Thousands								
January	468,333	482,802	516,289	3,593	3,982	4,587	32,512	34,352	37,096
February	432,813	443,923	472,853	4,186	4,173	4,340	32,484	34,764	37,526
March	483,353	503,506	543,088	4,616	4,662	4,924	32,566	35,277	37,708
April	464,386	494,911	535,827	4,019	4,385	4,592	33,046	35,882	38,011
May	487,027	524,170	553,689	4,274	4,535	5,089	33,150	36,416	38,551
June	473,782	510,554	540,923	3,944	4,528	5,134	32,327	35,762	38,341
July	473,394	513,035	541,028	3,735	4,205	4,438	32,602	35,799	
August	479,734	510,272	540,814	4,199	4,807	4,604	32,310	35,851	
September	455,183	485,067	508,575	4,073	4,587	4,890	32,539	35,663	
October	456,819	484,375	510,309	4,290	4,707	4,880	33,466	36,382	
November	438,543	469,641	490,178	3,793	4,008	4,714	33,652	36,167	
December	489,033	522,093		4,294	4,422		34,114	36,669	

1/ 7-14 months earlier.

Table 26--Broilers: Eggs set and chicks placed weekly 1/

Date	Eggs set			Chicks placed		
	1989	1990	Change	1989	1990	Change
	---Thousands---		Percent	---Thousands---		Percent
Jan.						
6	124,403	129,882	4.4	96,864	105,089	8.5
13	120,643	131,418	8.9	99,045	104,434	5.4
20	123,496	130,653	5.8	99,381	104,199	4.8
27	126,112	130,967	3.8	99,072	104,358	5.3
Feb.						
3	126,744	130,429	2.9	96,080	105,663	10.0
10	126,765	130,971	3.3	97,707	105,123	7.6
17	127,243	134,086	5.4	99,782	105,027	5.3
24	128,075	135,441	5.8	101,249	105,387	4.1
Mar.						
3	127,826	136,247	6.6	100,717	105,774	5.0
10	128,265	136,950	6.8	100,747	107,839	7.0
17	128,374	137,032	6.7	102,375	109,535	7.0
24	127,718	136,015	6.5	102,930	110,082	6.9
31	130,024	138,522	6.5	102,307	111,603	9.1
Apr.						
7	131,186	139,539	6.4	101,915	110,871	8.8
14	131,033	139,943	6.8	102,991	109,804	6.6
21	131,451	140,070	6.6	103,774	111,131	7.1
28	130,914	133,708	2.1	105,073	112,775	7.3
May						
5	130,983	136,094	3.9	105,878	111,629	5.4
12	131,375	138,198	5.2	105,571	112,866	6.9
19	132,893	138,526	4.2	105,434	107,519	2.0
26	132,360	140,238	6.0	106,010	110,604	4.3
Jun.						
2	134,048	139,080	3.8	105,914	111,510	5.3
9	133,498	139,023	4.1	106,408	111,556	4.8
16	133,040	139,681	5.0	105,951	112,361	6.0
23	133,091	136,813	2.8	107,465	111,667	3.9
30	124,691	127,627	2.4	106,809	111,632	4.5
July						
7	128,854	136,961	6.3	106,778	112,122	5.0
14	129,364	136,115	5.2	106,879	110,096	3.0
21	129,599	135,684	4.7	100,202	101,601	1.4
28	129,853	134,772	3.8	103,609	109,193	5.4
Aug.						
4	128,195	135,001	5.3	103,461	108,566	4.9
11	129,368	134,668	4.1	103,274	108,951	5.5
18	129,466	136,772	5.6	103,864	107,884	3.9
25	129,235	135,725	5.0	102,726	108,360	5.5
Sept.						
1	126,637	130,903	3.4	103,222	107,878	4.5
8	123,091	126,894	3.1	104,214	109,307	4.9
15	115,815	120,587	4.1	104,346	108,575	4.1
22	121,498	126,528	4.1	101,491	104,194	2.7
29	127,662	131,405	2.9	97,575	99,561	2.0
Oct.						
6	127,639	128,984	1.1	91,853	95,737	4.2
13	122,515	127,868	4.4	96,765	100,448	3.8
20	117,414	116,959	-0.4	101,737	106,259	4.4
27	118,293	119,656	1.2	102,406	104,352	1.9
Nov.						
3	127,373	130,817	2.7	98,248	101,616	3.4
10	132,137	135,631	2.6	93,491	92,130	-1.5
17	132,690	136,531	2.9	94,892	95,165	0.3
24	132,426	137,682	4.0	102,594	104,747	2.1
Dec.						
1	133,578	138,406	3.6	106,120	109,111	2.8
8	129,165	133,519	3.4	106,214	110,430	4.0
15	132,363	134,752	1.8	105,627	109,574	3.7
22	130,851	136,982	4.7	107,651	110,068	2.2
29	130,961	135,198	3.2	103,093	107,098	3.9

1/ 15 States: Ala., Ark., Calif., Del., Fla., Ga., Md., Miss., N.C., Pa., S.C., Tenn., Tex., Va., and W. Va.

Table 27--Federally inspected young chicken slaughter, 1988-90

Year	Number	Average weight	Live weight	Certified RTC
	Million	Pounds	Million pounds	
1988:				
I	1,267	4.35	5,511	3,996
II	1,303	4.30	5,611	4,079
III	1,317	4.20	5,530	4,035
IV	1,272	4.36	5,555	4,015
Year	5,159	4.30	22,208	16,124
1989:				
I	1,310	4.35	5,698	4,129
II	1,394	4.33	6,032	4,389
III	1,412	4.29	6,052	4,395
IV	1,383	4.41	6,101	4,420
Year	5,499	4.34	23,882	17,334
1990:				
I 1/	1,412	4.39	6,201	4,495
II 1/	1,470	4.36	6,416	4,657
III 1/	1,484	4.29	6,368	4,630

1/ Preliminary.

Prices Weaken

The average wholesale price for whole birds was 55 cents per pound in 1990, below the record-high 59 cents per pound in 1989. Average prices remained fairly stable at 56-57 cents per pound through the first three quarters. However, prices dropped sharply in the fourth quarter and averaged near 49 cents, reflecting large supplies of broilers and seasonal weak demand as consumers focused on turkey and ham purchases. However, prices strengthened in late December and in mid-January 1991 to levels above a year earlier. This reflects strong export demand, including purchases to replace broilers destroyed in a dock fire while awaiting export to the USSR.

Prices in 1991 are expected to be slightly lower than 1990, and average around a cent lower for the year, reflecting increased supplies of broilers and other meats. Quarterly average prices are expected to be fairly stable and be in the low-to-mid 50-cents-per-pound range. Average retail prices in the high 80's are expected for whole broilers in the first quarter of 1991, several cents below a year earlier. Slightly lower average retail prices are expected to continue for the rest of the year.

Table 28--Young chicken prices and price spreads

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
						Cents/lb.							
Farm price 1/:													
1987	31.0	30.0	29.0	29.2	29.9	27.6	27.6	31.7	27.8	25.1	26.3	24.5	28.3
1988	26.8	25.9	27.4	28.3	33.7	37.4	41.5	42.3	39.1	35.7	34.8	35.4	34.0
1989	34.6	34.7	38.6	39.1	44.6	42.2	38.7	35.7	36.1	30.2	29.4	28.6	36.0
1990	30.7	33.5	36.4	33.2	35.2	34.1	36.9	33.2	35.2	29.0	28.2	28.8	32.9
Wholesale RTC 12-city avg. 2/:													
1987	51.8	49.8	48.5	48.6	50.5	45.5	47.0	52.6	46.4	43.2	44.6	39.8	47.4
1988	43.9	44.9	48.4	48.7	56.6	61.5	66.5	68.9	62.8	57.7	57.1	58.8	56.3
1989	58.0	58.0	62.1	63.5	70.4	67.4	62.0	57.3	59.9	51.7	49.2	48.4	59.0
1990	51.7	57.4	60.4	55.3	57.9	56.4	59.5	54.9	57.4	48.8	48.0	49.6	54.8
U.S. avg. retail price:													
1987	82.1	83.2	80.4	79.2	78.2	77.1	75.5	78.5	79.3	79.1	75.6	73.6	78.5
1988	74.0	74.5	75.3	76.0	79.6	86.8	93.7	96.1	97.5	93.2	89.2	88.5	85.4
1989	90.5	89.9	91.3	93.2	96.1	98.2	96.4	95.4	94.2	91.0	87.9	88.3	92.7
1990	88.2	89.6	92.8	89.7	90.2	92.8	91.7	91.2	90.7	88.3	88.0	85.8	89.9
Price spreads retail-to-cons.:													
1987	24.3	26.8	25.2	25.3	21.2	18.7	21.2	20.2	33.1	30.2	25.2	26.1	24.8
1988	23.7	24.4	21.6	20.5	16.5	18.0	22.8	21.9	29.9	28.8	26.7	24.1	23.2
1989	27.3	28.6	24.9	29.4	20.2	25.1	27.7	30.9	29.4	33.1	32.0	33.6	28.5
1990	30.5	27.0	29.0	29.4	26.5	30.5	24.9	30.4	27.9	33.7	34.2	30.2	29.5
						1982-84 = 100							
Retail pr. index wh. chickens:													
1987	119.5	118.7	115.2	113.1	112.9	111.6	109.9	113.9	114.6	113.0	109.2	107.7	113.3
1988	107.9	109.5	110.3	111.6	117.4	125.9	137.4	140.1	142.0	136.0	131.7	131.0	125.1
1989	133.7	133.2	135.6	138.0	142.9	144.7	141.7	140.8	139.1	134.9	130.4	130.4	137.1
1990	131.5	133.6	138.4	134.9	134.8	138.2	137.6	136.7	136.3	133.8	132.9	130.6	134.9

1/ Liveweight. 2/ 12-city composite weighted average.

Net Returns Strong but Lower

Broiler production profits were strong in 1990, but below year-earlier levels due to lower broiler prices. Net returns averaged around 8 cents per pound in 1990, compared with nearly 10 cents in 1989, which was the second highest on record. The record, almost 13 cents per pound, was set in 1986. Fourth-quarter 1990 net returns were seasonally lower at 2-3 cents per pound, but slightly higher than fourth-quarter 1989. Lower feed prices, particularly soybean meal prices, partially offset lower broiler prices throughout much of the year.

Positive Net Returns Expected To Continue

Average net returns to broiler producers are expected to continue positive throughout 1991, reflecting lower feed costs and wholesale broiler prices near 1990 levels. Feed costs are estimated to be lower for all quarters of 1991 relative to 1990.

Broiler Futures Trading To Begin

Trading of broiler futures contracts will begin on February 7, 1991, and will offer a hedging instrument for use by producers, processors, food product buyers, traders, and others with interests in broiler price movements. Provision for cash settlement is the key difference between this contract and the previous one, last traded in 1982. There will be contracts for all months except January, March, September, and November, with the last day of trading the second-to-last Friday of the contract month. Each contract will be for 40,000 pounds of broiler chicken, with the cash settlement price to be based

Table 29--Poultry and eggs costs and returns 1/

Year	Production costs: Feed	Production costs: Total	Wholesale: Total costs 2/	Wholesale: Price 3/	Net returns
			Market eggs (cents/doz)		
1989:					
I	32.8	51.0	71.5	82.8	11.3
II	32.2	50.4	70.9	76.1	5.2
III	31.0	49.2	69.7	85.2	15.5
IV	28.3	47.0	67.0	96.1	28.6
Year	31.2	49.4	69.9	85.1	15.2
1990:					
I	27.6	45.9	66.3	90.8	24.4
II	29.6	47.8	68.3	76.8	8.6
III	30.0	48.2	68.7	79.3	10.6
IV	27.3	45.5	66.0	88.6	22.6
Year	28.6	46.9	67.3	83.9	16.6
			Broilers (cents/lb)		
1989:					
I	19.1	27.1	50.6	59.5	8.9
II	18.6	26.6	49.9	67.3	17.4
III	18.2	26.2	49.4	59.6	10.2
IV	16.8	24.8	47.5	49.8	2.3
Year	18.2	26.2	49.4	59.0	9.7
1990:					
I	15.7	23.7	46.0	56.5	10.5
II	15.8	23.8	46.1	56.6	10.5
III	16.8	24.8	47.4	57.2	9.7
IV	15.8	23.8	46.1	48.8	2.7
Year	16.0	24.0	46.4	54.8	8.4
			Turkeys (cents/lb)		
1989:					
I	27.9	41.6	68.3	61.6	-6.7
II	27.5	41.2	67.8	71.3	3.5
III	26.4	40.1	66.4	64.5	-1.9
IV	25.4	39.1	65.2	66.0	0.8
Year	26.7	40.4	66.8	66.0	-0.8
1990:					
I	23.1	36.8	62.3	55.6	-6.7
II	22.5	36.2	61.5	61.6	0.0
III	24.2	37.9	63.6	66.7	3.1
IV	23.6	37.3	62.9	67.0	4.1
Year	23.4	37.1	62.6	63.1	0.5

1/ Estimated costs and prices are weighted by monthly production. 2/ Based on farm cost converted to wholesale market value. 3/ Wholesale prices used are the 12-metro egg price, 12-city weighted average broiler price, and a weighted average of 8-16 lb young hens and 14-22 lb toms in Central, Western and Eastern Regions.

upon the USDA composite 12-city broiler price. The minimum price fluctuations will be .025 cents per pound ($10 per contract) and the daily price limits are 2 cents per pound ($800 per contract).

Broiler Exports To Continue Strong in 1991

Exports are expected to continue at a high level in 1991, but some uncertainties cloud the outlook, especially the financing of exports to the Soviet Union. In 1990 the USSR emerged as the major U.S. broiler export market. The large Soviet purchases represented nearly 30 percent of total U.S. broiler exports and were a significant factor behind the 40-percent increase in broiler exports to a record estimated at 1.13 billion pounds. U.S. broiler exports will likely fall below the 1990 levels if financing problems reduce exports to the USSR. As of mid-January no new 1991 sales to the USSR had been announced, pending resolution of export credit issues.

Export Credits to the USSR

U.S. export credit allocations to the Soviet Union were agreed upon in early January 1991, and broiler sales under the program are expected soon. One billion dollars is available, and of $900 million allocated, $25 million is for poultry meats. It is possible that some of the unallocated $100 million will later become available for poultry or other meats. At the 1990 rate, $25 million would cover broiler exports to the USSR for about one quarter of 1991, if all exports were dependent on U.S. export credit guarantees. Recent developments in the Baltic Republics could result in a reconsideration of further credits.

No export credit guarantees were available in 1990, but broiler industry representatives have stated that without credit assistance leg-quarter sales to the USSR in 1991 could decline to about 220 million pounds from the 300 million pounds sold during 1990. Conversely, with credit assistance, 1991 poultry meat sales to the Soviet Union could increase to 440-550 million pounds.

Whole broilers are in strong demand in the USSR and some have been shipped by France and Brazil as well as by the traditional Eastern European suppliers. The USSR has purchased very limited amounts of whole birds from the United States because leg quarters are priced much lower. The average unit export value of U.S. whole birds to all destinations during January through October 1990 was 52 cents per pound, compared with the 32-cents-per-pound average-unit-export value of leg quarters to the USSR during the same period. U.S exports to the USSR are being broadened to include a chicken frank developed specifically for that market. In general, in servicing the large Soviet market, the United States has the advantage of having large, reliable supplies of broiler parts at low prices.

Table 30--U.S. broiler exports to major importers,

Country or area	January -October 1989	January -October 1990
	1000 lb.	
U.S.S.R.	0	259,442
Japan	185,057	174,339
Hong Kong	125,476	151,773
Mexico	76,580	69,216
Canada	56,649	64,714
Singapore	47,936	41,006
Romania	0	26,466
Jamaica	45,821	22,539
Spain	8,326	16,328
Saudi Arabia	2,944	12,061
Netherlands Antilles	8,128	10,706
French Polynesia	9,953	9,136
Other	76,182	103,421
Grand Total	643,052	961,147

Table 31--U.S. mature chicken exports to major importers

Country or area	January -October 1989	January -October 1990
	1000 lb.	
Canada	2,466	6,936
Netherlands Antilles	3,034	3,584
St. Lucia	2,523	2,057
Antigua	886	1,408
Mexico	3,450	1,062
Japan	214	715
St. Christ-Nevis	694	583
Bahamas	221	541
Hong Kong	24	479
Aruba	1,084	432
Singapore	68	410
Other	4,029	3,331
Grand Total	18,693	21,538

Other U.S. Broiler Export Markets

Sales to most other major U.S. export markets are expected to increase in 1991, as U.S. prices continue to be generally competitive. Production is declining in the large Pacific import markets while consumption continues to increase. During 1990, while exports to Japan declined slightly, to about 210 million pounds, it remained the highest-valued market. Out of a total value of broiler exports at about $550 million in 1990, Japan accounted for about $115 million and the Soviet Union slightly over $100 million.

Exports to Hong Kong, another major market, increased 10 percent to about 180 million pounds in 1990. Sales to Canada were also up substantially to about 80 million pounds. Exports to the Middle East were up sharply in 1990, to about 30 million pounds, assisted in part by the Export Enhancement Program (EEP). It will also play a role in 1991 exports to the Middle East.

Exports to Mexico and Singapore declined in 1990. Exports to Singapore might increase in 1991, assisted in part by EEP for whole birds, but sales to Mexico might decline again in 1991 as their production has increased. This is partially due

to the extension of import license requirements by the Government, which provides price protection for domestic producers.

Prepared or Preserved Poultry Meat Exports Rise

Exports of higher-valued products nearly doubled in 1990, to 60 million pounds. Canada purchased about 40 percent, followed by Mexico with 27 percent, Hong Kong with 10 percent, and Japan with 9 percent. The average unit export value of these products, January through October 1990, was $1.35 per pound in comparison with 52 cents for whole broilers and 46 cents for broiler parts.

Turkeys

Slower Production Increases in 1991

Turkey production will likely expand more slowly in 1991, increasing by about 5 percent compared with 9 percent in 1990. Generally poor returns, weak prices except for early fall 1990, and the largest stocks in 30 years are the major factors expected to dampen producer expansion plans for 1991. The impact of high stock levels was most recently demonstrated after stocks reached high levels in late 1988, and production levels remained unchanged for the first half of the following year.

First-quarter 1991 production is expected to be 4-5 percent above a year earlier, based on poult placements during August through November. Since the large, 11-percent increase in August, placements have been moderate. The first-quarter 1991 production increase contrasts to the 22-percent jump in early 1990. Second and third quarter turkey production is estimated to grow about 5 percent, and about 4 percent in the fourth quarter.

While turkey production during the second half of 1990 averaged a slower year-over-year increase of about 5 percent, stocks were already at high levels at mid-year. In addition, consumption increased more slowly in the second half of 1990 compared with earlier in the year. The relatively high prices reached briefly in early fall probably contributed to the slowdown in consumption growth. The result of these production and consumption movements was a sharp downturn in turkey prices at the end of the year.

Stocks High

At the beginning of 1990 turkey stocks were moderate, but with rapid production increases, stocks increased to about 290 million pounds by the end of the year, the highest level since the late 1960's. Relatively slow disappearance during November played a role. Stocks in November dropped by 289 million pounds compared with 313 million in 1989 and an average November draw-down of 297 million pounds for the previous 5 years.

Table 32--Turkey hatchery operations 1/

	Total turkeys placed 2/			Eggs in incubators first of month, changes from previous year		
	1988/89	1989/90	1990/91	1988/89	1989/90	1990/91
	- - -Thousands - - -			- - Precent - -		
Sept.	15,725	19,900	19,705	7	27	2
Oct.	16,821	20,169	21,454	5	25	0
Nov.	18,413	20,733	21,629	4	14	6
Dec.	20,444	21,511	22,777	6	14	3
Jan.	23,183	24,702		2	9	3
Feb.	23,842	24,870		6	6	
Mar.	26,959	27,286		5	1	
Apr.	25,973	28,904		8	6	
May	28,369	29,036		10	5	
June	29,039	29,196		12	7	
July	26,329	29,030		16	2	
Aug.	23,002	25,631		21	11	

1/ Breakdown by breed not shown to avoid disclosing individual operations. 2/ Excludes exported poults.

Table 33--Federally inspected turkey slaughter, 1988-90

Year	Number	Average weight	Live-weight	Certified RTC
	Million	Pounds	Million pounds	
1988				
I	50.3	21.0	1,054.0	836.6
II	60.0	20.6	1,236.3	981.1
III	65.7	20.4	1,343.3	1,065.6
IV	61.4	21.4	1,314.2	1,040.1
Year	237.4	20.9	4,947.7	3,923.4
1989				
I	47.9	21.2	1,012.0	803.5
II	61.8	20.7	1,279.1	1,014.3
III	72.4	20.5	1,483.0	1,176.4
IV	69.6	21.5	1,492.4	1,180.6
Year	251.7	21.0	5,266.5	4,174.8
1990				
I 1/	57.2	21.7	1,240.2	983.4
II 1/	65.6	21.2	1,391.6	1,101.7
III 1/	74.6	20.8	1,548.0	1,222.7

1/ Preliminary.

On December 1, total turkey stocks, at 334 million pounds, were 29 percent above a year earlier and 28 percent above the average of the previous 5 years. Whole-bird stocks increased 48 percent and other turkey stocks increased 10 percent above a year earlier. These large stocks contributed to the sharp drop in prices.

Sharp Price Break as 1990 Ended

Prices dropped sharply in late December with Eastern region wholesale hens at about 54 cents per pound compared with the October peak of 77 cents. Retail prices moved from $1.06 to $0.96 per pound during the same period. Turkey parts prices also declined, reflecting the sharp production increase in October, at a time when stocks were already high. Also, placements indicated that December slaughter would probably be up about 10 percent. November consumption was only marginally above a year earlier, and finally, late in the year, pork prices weakened and hams were featured in direct competition with turkey.

Table 34--Turkey prices and price spreads

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
						Cents/lb.							
Farm price 1/:													
1987	35.1	35.8	35.7	36.3	35.5	34.1	33.5	32.1	31.3	30.2	34.0	38.4	34.3
1988	32.3	29.7	28.4	28.4	29.8	32.1	40.4	42.0	45.4	48.4	47.9	38.3	36.9
1989	35.5	38.4	40.3	42.0	43.6	43.8	41.2	40.8	36.4	38.2	40.7	39.3	40.0
1990	35.9	33.7	37.2	37.0	38.2	38.2	38.4	39.9	40.6	42.2	43.0	35.6	38.3
New York, hens, 8-16 lb 2/:													
1987	55.3	58.5	60.3	58.3	55.3	55.7	56.3	56.1	56.1	54.7	60.7	66.5	57.8
1988	52.8	47.1	47.0	46.9	49.3	57.1	70.8	70.5	76.0	79.6	76.0	61.6	61.1
1989	59.0	62.2	65.7	68.3	72.1	73.0	66.4	62.6	57.9	67.8	72.5	72.7	66.7
1990	55.6	55.2	58.9	59.6	61.3	62.9	63.4	66.6	69.0	76.2	73.7	56.1	63.2
4 region average retail price, wholebirds:													
1987	103.6	103.2	103.0	100.4	102.8	105.1	105.8	105.1	103.3	102.6	90.0	89.3	101.2
1988	93.1	92.9	91.0	89.4	92.9	92.9	96.0	99.5	100.6	104.0	99.2	97.1	95.7
1989	97.4	96.8	97.6	98.3	100.1	101.3	104.6	104.1	102.0	102.2	93.2	95.0	99.4
1990	98.9	98.3	99.4	97.1	99.8	99.8	100.8	101.4	103.3	105.6	91.1	96.0	99.3
Price spreads, retail-to-consumer:													
1987	39.8	37.4	35.4	33.4	37.3	40.1	41.1	41.8	39.0	38.3	22.0	13.6	34.9
1988	29.8	35.0	33.4	33.0	35.1	24.6	23.7	21.0	17.3	16.5	14.7	26.7	25.9
1989	29.8	29.9	25.7	23.2	20.7	20.7	30.2	32.3	34.2	28.9	13.4	15.4	25.4
1990	33.7	33.7	32.1	27.7	29.8	29.7	32.1	27.8	26.7	23.7	8.8	29.7	27.9
						1982-84 = 100							
Consumer price index 3/:													
1987	113.3	111.6	112.0	109.6	111.6	111.8	112.1	111.6	109.4	109.2	103.5	103.9	110.0
1988	107.7	107.2	107.2	107.5	108.3	109.3	109.8	112.4	114.2	115.5	113.1	113.3	110.5
1989	114.2	116.3	118.7	121.5	123.2	124.1	126.0	124.6	124.4	123.2	119.2	121.1	121.4
1990	123.9	124.2	124.6	123.4	123.6	122.7	123.9	123.1	124.7	126.9	120.4	123.0	123.7

1/ Liveweight. 2/ Wholesale, ready-to-cook. 3/ Other poultry CPI.

Little Change Expected in 1991 Prices

Turkey prices, at low levels in January, are expected to strengthen, and for the year average about the same as during 1990. Eastern region hens are expected to average 60-66 cents per pound, compared with 63 cents during 1990. First-quarter prices are expected to average 52-56 cents compared with 57 cents during 1990. Second-quarter prices will likely strengthen to 57-63 cents.

Prices are expected to recover in 1991 as production increases more slowly than last year and stocks are worked down. Continued relatively high red meat prices during 1991 will support increased turkey consumption and price recovery. In the second half of this year, prices are expected to average slightly above year-earlier levels. Per capita consumption is forecast to increase by about a pound, to slightly over 19 pounds.

Producer Net Returns Remain Near Breakeven

With turkey prices expected to strengthen later this year and feed prices expected to remain slightly below 1990, returns for 1991 are estimated to be about the same as in 1990—near breakeven. However, returns for whole bird production are expected to be negative in the first quarter, and possibly in the second. Despite the low December prices, fourth-quarter 1990 returns remained above breakeven, aided by the lowest feed prices since 1987.

Table 35--U.S. turkey exports to major importers

Country or area	January- October 1989	1990
	1000 lb.	
Mexico	7,838	10,427
Hong Kong	3,091	4,859
South Korea	251	4,498
Germany	413	2,400
Japan	1,628	2,328
USSR	0	2,327
Western Samoa	2,119	1,542
Canada	5,024	1,523
South Africa	1,032	1,409
Marshall Islands	976	934
Greece	552	885
Other	10,983	8,730
Grand Total	33,907	41,862

Eggs

Production Increases

A generally larger, younger, and more productive laying flock resulted in slightly over a 1-percent increase in total egg production, but only about a half-percent increase in table-egg production in 1990. Producers were cautious in their expansion, and on a month-to-month basis the size of the table-egg flock generally remained below 1989 levels until the fourth quarter. The table-egg flock on December 1, at 234 million hens, was 1 percent larger than on both the first of the prior month and a year earlier. Fourth-quarter production estimates are for a 2-percent increase in table-egg production relative to the fourth quarter of 1989.

Figure 4
Table Egg Flock Size

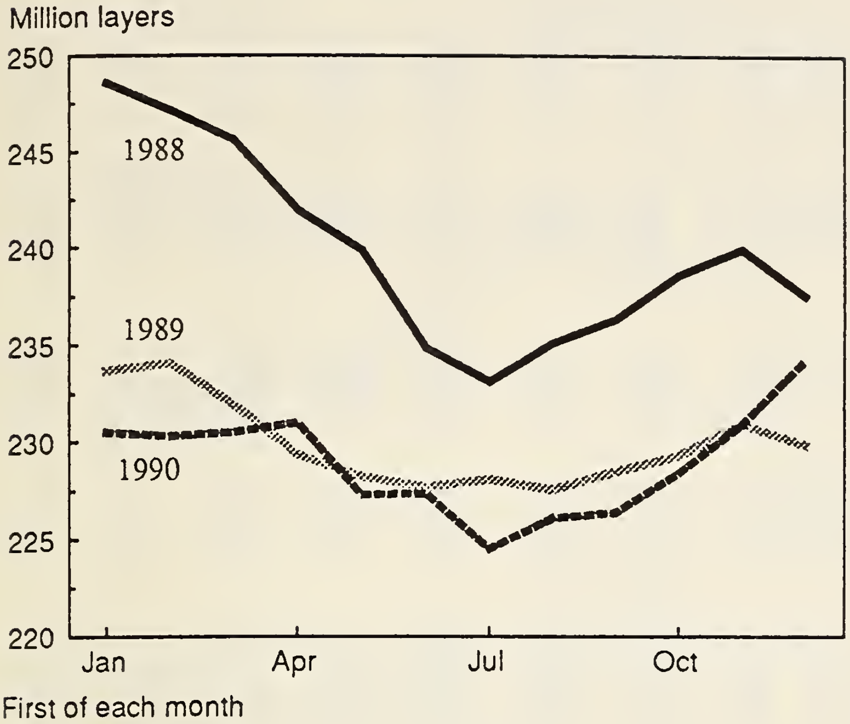


Table 37--Egg-type chick hatchery operations

Month	Hatch 1988	Hatch 1989	Hatch 1990	Eggs in incubators 1/ 1988	Eggs in incubators 1/ 1989	Eggs in incubators 1/ 1990
	-------Thousands--------			------Percent-------		
Jan.	29,274	26,655	32,048	-4	-20	28
Feb.	28,433	27,367	32,248	-24	2	23
Mar.	35,615	32,577	36,407	-17	-15	26
Apr.	34,749	36,133	37,207	-16	4	6
May	35,984	38,513	37,706	-17	3	3
June	33,049	34,708	34,499	-6	-2	-4
July	24,876	29,814	31,696	-24	16	-1
Aug.	27,838	32,817	33,039	-23	17	0
Sept.	30,918	32,850	32,724	-5	4	5
Oct.	31,007	33,298	32,143	-11	7	-2
Nov.	29,425	29,662	29,991	1	-2	0
Dec.	27,181	29,284		-11	9	8

1/ First of the month, percent change from previous year.

Table 38--Layers on farms and eggs produced, 1988-89 1/

Quarters	Number of layer 1989	Number of layer 1990 2/	Eggs per layer 1989	Eggs per layer 1990 2/	Eggs produced 1989	Eggs produced 1990 2/
	- Million -		- Number -		Million dozen	
I	272	271	61.5	61.3	1,394.4	1,385.2
II	268	271	63.4	63.7	1,417.1	1,437.6
III	266	267	62.8	63.5	1,393.2	1,412.2
IV	268	273	62.1	62.4	1,386.9	1,419.9
Annual	269	271	249.8	250.9	5,591.6	5,654.9

1/ Marketing year beginning December 1. 2/ Preliminary.

A slightly larger layer flock will produce about 5.7 billion dozen eggs in 1991, about 1 percent above 1990. Table-egg production is expected to increase about half a percent. The number of egg-type chicks hatched during January through November 1990 was 4 percent higher than a year earlier, and up only 1 percent in November. First-quarter production is expected to increase 1-2 percent relative to a year earlier, followed by fractional increases in the following two quarters as producers adjust to expected lower egg prices.

Record Prices in 1990

The 1990 average price for New York Grade A large eggs was a record 82.2 cents per dozen, and surpassed the 81.9 cents of 1989, continuing the recovery from the unprofitable 62 cents of 1987 and 1988. Wholesale egg prices remained strong throughout 1990, but as the year progressed there was a gradual reduction in monthly average prices relative to 1989. Fourth-quarter prices averaged over 88 cents per dozen, 4 cents lower than a year earlier. Retail prices remained high during 1990, averaging $1.01 per dozen. Fourth-quarter prices also averaged $1.01 per dozen, reflecting heavy holiday demand.

Table 36--Force Moltings and Light-type hen slaughter

Month	Force molt layers 1/ Being molted 1988 2/	Being molted 1989 2/	Being molted 1990 3/	Molt completed 1988 2/	Molt completed 1989 2/	Molt completed 1990 3/	Light-type hens slaughtered under Federal inspection 1988	1989	1990
	---Percent---						---Thousands---		
January	3.8	4.1	3.0	20.8	23.9	21.5	13,574	12,219	11,500
February	5.0	4.9	5.5	20.3	21.5	20.9	14,647	11,819	9,740
March	3.8	4.3	4.1	20.5	21.7	21.7	15,312	13,645	11,586
April	3.9	3.9	1.9	19.3	21.5	22.0	15,034	10,528	13,622
May	5.9	5.3	4.8	18.6	21.4	19.9	14,107	11,868	13,159
June	7.6	5.6	4.3	19.9	21.7	20.0	13,157	10,316	11,805
July	6.0	4.9	3.8	21.2	21.7	20.7	8,601	10,194	10,786
August	4.3	4.0	4.0	22.4	22.7	20.6	10,555	10,871	11,487
September	4.3	2.5	3.4	22.4	23.0	20.9	9,119	10,777	9,148
October	4.5	4.3	3.7	22.3	22.9	21.0	10,136	10,249	10,548
November	3.9	4.6	3.4	22.6	23.5	20.7	11,092	9,158	9,278
December	3.5	2.7	2.7	24.1	23.9	20.9	13,444	11,307	

1/ Revisions include data from late reports or other corrections developed by the Food Safety and Inspection Service. 2/ Percent of hens and pullets of laying age in 15 selected States. 3/ Percent of hens and pullets of laying age in 20 selected States.

Table 39--Egg prices and price spreads

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
							Cents/doz.						
Farm price 1/:													
1987	51.7	50.1	46.0	45.8	39.5	40.3	40.8	40.5	49.7	40.9	45.4	38.7	44.1
1988	39.1	36.9	40.0	35.8	33.0	36.3	49.5	50.1	56.0	50.6	51.7	53.2	44.4
1989	55.8	53.8	73.3	58.0	54.1	55.5	56.7	64.5	64.2	64.2	73.1	77.6	62.6
1990	78.8	63.1	73.1	64.2	51.2	54.2	46.6	58.2	61.6	66.5	66.2	70.3	62.8
New York (cartoned) Grade A, large 2/:													
1987	67.1	65.2	62.0	62.4	55.6	58.7	59.1	63.2	68.3	60.2	60.5	56.9	61.6
1988	55.9	52.7	56.4	52.1	50.9	56.8	73.6	69.5	75.6	66.0	65.3	70.4	62.1
1989	72.0	71.1	92.2	76.6	73.7	75.2	76.5	84.2	83.8	84.8	93.4	99.6	82.0
1990	92.4	79.6	91.5	82.4	67.9	73.6	70.9	80.3	82.2	86.5	86.5	92.5	82.2
4-Region average, Grade A, large retail price													
1987	86.2	82.3	80.0	78.6	76.3	71.1	76.3	73.0	83.7	77.8	80.5	73.1	78.3
1988	76.0	71.8	74.0	71.9	67.8	70.5	80.3	90.9	87.4	89.6	83.9	83.3	79.0
1989	94.1	89.0	103.1	99.7	95.6	93.7	96.1	98.3	103.8	102.3	108.0	113.7	99.8
1990	122.3	104.1	111.1	109.2	94.0	93.0	89.9	95.4	94.6	101.2	101.8	100.1	101.4
Price spreads retail-to-consumer:													
1987	17.4	14.5	16.5	15.3	20.8	12.7	16.4	15.7	13.6	18.4	18.4	15.4	16.3
1988	19.0	18.2	14.9	20.0	16.5	13.0	7.0	20.5	11.2	22.0	16.0	10.1	15.7
1989	18.2	18.6	10.2	23.1	21.2	17.2	18.3	12.1	16.7	16.0	12.3	12.7	16.4
1990	26.7	22.1	16.8	24.3	24.0	17.2	16.9	14.5	12.9	14.7	16.2	7.8	17.8
							1982-84 = 100						
Consumer price index:													
1987	100.8	97.8	93.9	91.1	88.5	84.1	87.8	85.8	97.6	91.4	93.9	85.5	91.5
1988	90.1	85.5	87.9	85.0	81.8	83.6	95.1	104.2	103.1	105.5	101.2	99.6	93.6
1989	112.0	106.1	122.9	117.6	112.6	110.6	112.8	115.2	124.6	122.9	129.4	134.9	118.5
1990	143.9	124.7	131.6	130.3	115.0	112.2	109.1	119.6	120.6	125.5	128.5	128.7	124.1

1/ Market (table) eggs including eggs sold retail by the producer; data not available prior to 1982. 2/ Price to volume buyers.

Lower Egg Prices Expected

Prices are likely to continue relatively strong through 1991, although they will be tempered by production increases and are expected to be lower than in 1990. First-quarter wholesale prices are expected to average in the mid-80's, compared with about 88 cents per dozen last quarter and a year ago. First-quarter retail prices are expected to average around 98 cents per dozen, well below the $1.12 of a year ago. Population growth is expected to exceed growth in table-egg production, resulting in a slight decline in per capita consumption in 1991, to around 233 eggs, compared with 234 in 1990.

Egg prices continue to be subjected to additional uncertainties due to concerns over Salmonella enteritidis (Se.). Actions by the USDA Salmonella Enteritidis Task Force have diverted table-eggs to the breaker-egg market, contributing to strength in table-egg prices, while pushing breaker-egg prices lower. Processing breaker eggs into egg products includes pasteurization, which kills any Se. bacteria. Concerns about Se. may create additional volatility in egg prices in 1991, as news of potential or actual diversions is digested by the market.

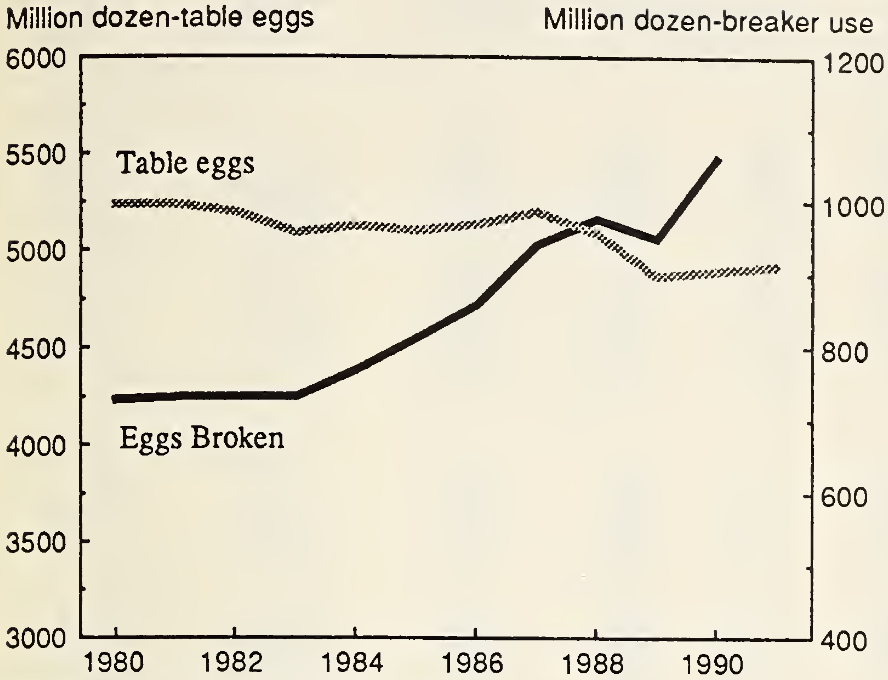
Record Net Returns to Egg Producers

Net returns to egg producers were positive for all quarters of 1990 and, at an annual average of around 16 cents per dozen, surpassed the record-high 15 cents set in 1989. Average fourth-quarter net returns were around 23 cents per dozen, which were good, but below the record quarterly returns of 29 cents per dozen in the fourth quarter 1989. The large returns experienced in 1990 reflect the unusual, persistent strength in egg prices coupled with lower production costs. Returns are expected to remain favorable through the first quarter of 1991, and will likely move lower as egg supplies increase but remain positive through all of 1991.

Egg Product Use

Total use of shell eggs in the production of liquid, frozen, and dried egg products increased 12 percent in 1990, to around 1.1 billion dozen. Imports supplied less than one percent, 6.7 million dozen, reflecting increased costs of egg imports and an abundance of domestic breaker eggs. The volume of domestically produced eggs going to breakers increased 12 percent in 1990, from 950 million dozen to over 1 billion dozen. This increase reflects Department of Defense purchases of egg products in support of Desert Shield and diversions of eggs from flocks under Se. restrictions from table-egg use to breaker use. Egg products represented almost 22 percent of 1990 table-egg consumption. The increased use of eggs in processed form is expected to continue in 1991. The share of breaker eggs used in liquid and dried product forms were 35 and 34 percent respectively, with liquid use surpassing dried use for the first time.

Figure 5
Table Egg Production and Breaker Use



Eggs broken under Federal inspection

Figure 6
Egg Products By Type

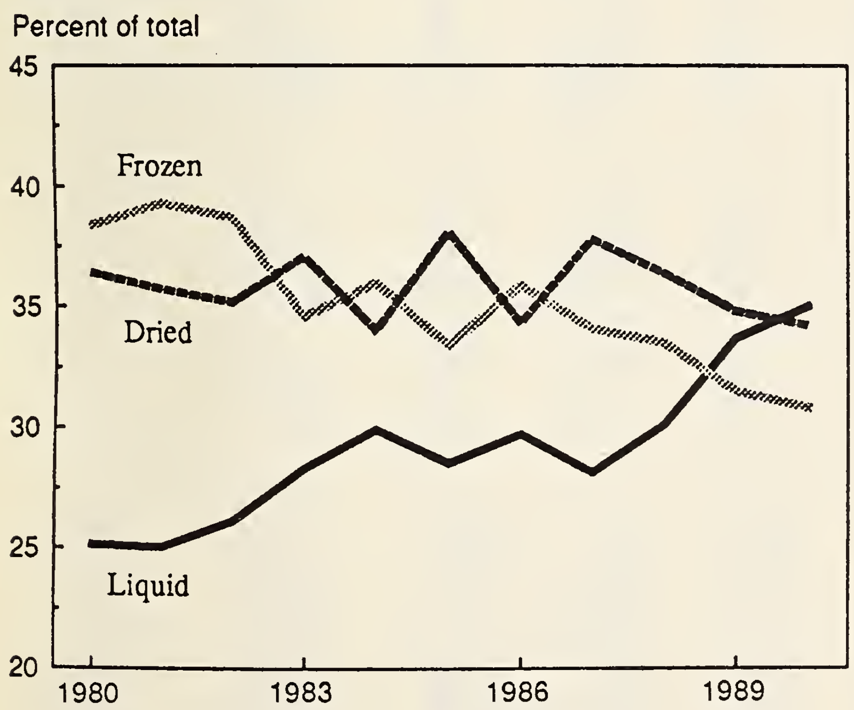


Table 40--Shell eggs broken and egg products produced under Federal inspection

Period	Shell eggs broken	Egg products produced 1/ Liquid	Frozen	Dried
	Thouand dozen	Thousand pounds		
1989:				
January	79,780	28,584	29,255	10,208
February	69,829	26,991	25,612	9,392
March	69,988	31,581	25,136	7,764
April	76,547	29,355	29,153	8,865
May	91,081	32,678	34,600	10,091
June	89,658	31,996	33,306	10,067
July	81,260	28,762	30,521	9,192
August	86,929	34,053	34,325	8,620
September	76,896	33,170	29,094	7,715
October	82,369	37,743	31,738	8,368
November	76,864	36,989	28,864	7,350
December	67,770	31,205	27,091	6,753
Total	948,971	383,107	358,695	104,385
1990:				
January	81,158	37,182	30,282	8,204
February	75,303	33,657	29,998	7,834
March	84,119	39,976	33,951	8,718
April	80,647	35,311	30,582	8,440
May	95,078	41,162	36,587	11,073
June	92,228	37,716	32,672	10,067
July	94,525	37,339	36,391	10,760
August	96,450	40,629	34,151	9,925
September	83,822	37,138	31,546	7,536
October	98,636	45,553	41,798	8,482
November	89,368	38,658	35,287	9,262

Table 41--U.S. egg exports to major importers 1/

Country or area	January -October 1989	1990
	Thousand dozen	
Japan	26,055	20,540
Canada	12,637	20,027
Hong Kong	6,240	11,086
Mexico	13,843	6,283
Jamaica	3,554	3,141
United Kingdom	841	1,370
Iraq	3,900	1,354
Brazil	889	1,290
Haiti	1,394	942
Germany	1,497	831
Other	8,134	8,278
Grand Total	78,984	75,142

1/ Shell, and shell equivalent of egg products.

Table 42--Red meat supply and utilization, carcass and retail weight 1/

Year	Production: Commercial	Production: Farm	Beginning stocks	Imports	Total supply	Exports	Ending stocks	Total disappearance	Per capita: Carcass weight	Per capita: Retail weight
	Million pounds								Pounds	
Beef:										
1989										
I	5,530	40	422	566	6,558	227	398	5,933	23.9	16.9
II	5,777	17	398	533	6,725	265	322	6,138	24.7	17.4
III	5,893	16	322	524	6,755	267	307	6,181	24.8	17.5
IV	5,774	40	307	552	6,673	264	335	6,074	24.3	17.1
Year	22,974	113	422	2,175	25,684	1,023	335	24,326	97.8	68.9
1990										
I	5,507	40	335	598	6,480	232	408	5,840	23.3	16.4
II	5,733	17	408	573	6,731	237	341	6,153	24.5	17.3
III	5,814	16	341	597	6,768	270	322	6,176	24.6	17.3
Year 2/	22,629	113	335	2,330	25,407	1,035	365	24,007	95.7	67.4
1991										
Year 2/	23,000	113	365	2,270	25,748	1,055	315	24,378	96.3	67.9
Pork:										
1989										
I	3,885	19	437	251	4,592	53	467	4,073	16.4	12.7
II	3,929	8	467	247	4,651	65	442	4,144	16.7	13.0
III	3,790	8	442	198	4,438	65	341	4,032	16.2	12.6
IV	4,155	19	341	200	4,715	79	315	4,321	17.3	13.4
Year	15,759	54	437	896	17,146	262	315	16,569	66.6	51.7
1990										
I	3,902	19	315	212	4,448	69	355	4,024	16.1	12.5
II	3,645	8	355	231	4,239	59	358	3,822	15.2	11.8
III	3,639	8	358	236	4,241	47	290	3,903	15.5	12.0
Year 2/	15,311	54	315	923	16,603	228	300	16,075	64.0	49.7
1991										
Year 2/	15,600	54	300	965	16,919	255	375	16,289	64.4	50.0
Veal:										
1989										
I	91	4	5	0 3/	100	0	7	93	0.4	0.3
II	85	1	7	0	93	0	6	87	0.4	0.3
III	84	2	6	0	92	0	5	87	0.3	0.3
IV	84	4	5	0	93	0	4	89	0.4	0.3
Year	344	11	5	0	360	0	4	356	1.4	1.2
1990										
I	79	4	4	0	87	0	4	83	0.3	0.3
II	74	1	4	0	79	0	5	74	0.3	0.2
III	80	1	5	0	86	0	6	80	0.3	0.3
Year 2/	321	9	4	0	334	0	6	328	1.3	1.1
1991										
Year 2/	292	9	6	0	307	0	4	303	1.2	1.0
Lamb and Mutton:										
1989										
I	88	2	6	16	112	1	7	104	0.4	0.4
II	80	1	7	16	104	0	8	96	0.4	0.3
III	81	1	8	15	105	1	7	97	0.4	0.3
IV	92	2	7	16	117	0	8	109	0.4	0.4
Year	341	6	6	63	416	2	8	406	1.6	1.5
1990										
I	93	2	8	12	115	1	8	106	0.4	0.4
II	90	1	8	12	111	0	10	101	0.4	0.4
III	85	1	10	14	110	1	9	100	0.4	0.4
Year 2/	359	6	8	55	428	2	8	418	1.7	1.5
1991										
Year 2/	363	6	8	55	432	2	7	423	1.7	1.5
Total red meat:										
1989										
I	9,594	65	870	833	11,362	281	879	10,203	41.2	30.2
II	9,871	27	879	796	11,573	330	778	10,465	42.1	31.1
III	9,848	27	778	737	11,390	333	660	10,397	41.7	30.8
IV	10,105	65	660	768	11,598	343	662	10,593	42.4	31.2
Year	39,418	184	870	3,134	43,606	1,287	662	41,657	167.4	123.3
1990										
I	9,581	65	662	822	11,130	302	775	10,053	40.2	29.6
II	9,542	27	775	816	11,160	296	714	10,150	40.5	29.7
III	9,618	26	714	847	11,205	318	627	10,259	40.8	30.0
Year 2/	38,620	182	662	3,308	42,772	1,265	679	40,828	162.7	119.7
1991										
Year 2/	39,255	182	679	3,290	43,406	1,312	701	41,393	163.6	120.4

1/ May not add due to rounding. 2/ Forecast. 3/ Beginning in 1989 veal trade no longer reported separately.

Table 43--Poultry supply and utilization

Year	Slaughter: Federally Inspected	Slaughter: Other	Slaughter: Total	Beginning stocks	Total supply	Exports	Ending stocks	Total disappearance	Per capita Retail weight
	Million pounds								Pounds
Young chicken:									
1989									
I	4,129	21	4,150	36	4,186	176	32	3,978	16.1
II	4,389	24	4,413	32	4,445	208	34	4,202	16.9
III	4,395	25	4,420	34	4,455	190	36	4,229	17.0
IV	4,420	25	4,445	36	4,481	240	38	4,203	16.8
Year	17,334	94	17,428	36	17,464	814	38	16,612	66.8
1990									
I	4,495	26	4,521	38	4,559	277	31	4,250	17.0
II	4,657	28	4,685	31	4,717	310	30	4,377	17.5
III 2/	4,630	28	4,658	30	4,688	255	24	4,408	17.6
Year 3/	18,572	108	18,680	38	18,718	1,133	24	17,561	70.0
1991									
Year 3/	19,525	106	19,631	24	19,655	1,140	30	18,485	73.1
Other chicken:									
1989									
I	137	12	148	157	305	5	146	153	0.6
II	135	12	147	146	293	4	158	131	0.5
III	132	11	143	158	301	6	155	139	0.6
IV	126	11	136	155	292	8	189	95	0.4
Year	530	45	575	157	731	24	189	518	2.1
1990									
I	133	11	145	189	334	8	219	106	0.4
II	145	12	158	219	377	7	236	134	0.5
III 2/	129	11	140	236	376	5	202	169	0.7
Year 3/	527	45	572	189	762	26	215	521	2.1
1991									
Year 3/	535	46	581	215	796	26	200	570	2.3
Total chicken:									
1989									
I	4,266	33	4,299	192	4,491	181	179	4,131	16.7
II	4,524	35	4,559	179	4,738	213	192	4,333	17.4
III	4,527	36	4,563	192	4,756	196	191	4,368	17.5
IV	4,546	35	4,581	191	4,773	247	228	4,298	17.2
Year	17,864	139	18,003	192	18,196	838	228	17,130	68.9
1990									
I	4,628	37	4,665	227	4,893	285	250	4,358	17.4
II	4,802	40	4,843	250	5,094	317	266	4,511	18.0
III 2/	4,759	39	4,798	266	5,063	260	226	4,577	18.3
Year 3/	19,099	153	19,252	227	19,480	1,159	239	18,082	72.1
1991									
Year 3/	20,060	152	20,212	239	20,451	1,166	230	19,055	75.4
Turkey:									
1989									
I	804	17	820	250	1,070	8	269	793	3.2
II	1,014	25	1,039	269	1,308	10	455	844	3.4
III	1,176	30	1,206	455	1,661	12	569	1,080	4.3
IV	1,181	30	1,211	569	1,780	11	236	1,534	6.1
Year	4,175	101	4,276	250	4,526	41	236	4,250	17.1
1990									
I	983	23	1,007	236	1,243	11	319	912	3.6
II	1,102	27	1,129	319	1,448	10	489	949	3.8
III 2/	1,223	32	1,254	489	1,744	14	620	1,110	4.4
Year 3/	4,558	113	4,671	236	4,906	48	290	4,569	18.2
1991									
Year 3/	4,770	116	4,886	290	5,176	45	250	4,881	19.3
Total poultry:									
1989									
I	5,070	49	5,119	442	5,561	189	448	4,924	19.9
II	5,538	60	5,599	448	6,047	223	647	5,177	20.8
III	5,704	66	5,770	647	6,416	208	760	5,448	21.9
IV	5,727	66	5,792	760	6,553	258	463	5,832	23.3
Year	22,039	241	22,280	442	22,722	878	463	21,380	85.9
1990									
I	5,611	60	5,672	463	6,135	297	570	5,269	21.0
II	5,904	68	5,972	570	6,542	327	755	5,460	21.8
III 2/	5,982	70	6,052	755	6,807	274	846	5,687	22.6
Year 3/	23,657	265	23,922	463	24,386	1,206	529	22,651	90.2
1991									
Year 3/	24,830	268	25,098	529	25,627	1,211	480	23,936	94.6

1/ May not add due to rounding. 2/ Estimate. 3/ Forecast.

Table 44--Total red meat and poultry supply and utilization, carcass and retail weight 1/

Year	Total production	Beginning stocks	Imports	Total supply	Exports	Ending stocks	Total disappearance	Per capita Carcass weight	Per capita Retail weight
	Million pounds							Pounds	
Total red meat and poultry:									
1989									
I	14,778	1,312	833	16,924	470	1,327	15,127	61.0	50.1
II	15,497	1,327	796	17,620	553	1,425	15,642	63.0	51.9
III	15,645	1,425	737	17,806	541	1,420	15,845	63.6	52.6
IV	15,962	1,420	768	18,150	601	1,125	16,424	65.7	54.6
Year	61,882	1,312	3,134	66,328	2,165	1,125	63,037	253.4	209.2
1990									
I	15,318	1,125	822	17,265	599	1,344	15,322	61.2	50.4
II	15,541	1,344	816	17,701	623	1,469	15,610	62.3	51.4
III	15,696	1,469	847	18,012	592	1,474	15,947	63.5	52.7
Year 2/	62,724	1,125	3,308	67,158	2,471	1,208	63,479	252.9	209.9
1991									
Year 2/	64,535	1,208	3,290	69,033	2,523	1,181	65,329	258.2	215.0

1/ May not add due to rounding. 2/ Forecast.

Table 45--Egg supply and utilization (population includes military) 1/

Year	Production	Beginning stocks	Breaking egg use	Imports 2/	Total supply	Exports	Hatching egg use 3/	Ending stocks	Consumption Total	Consumption Per capita
Total eggs					Million dozen					
1989										
I	1,388.8	15.2	---	1.9	1,405.9	23.7	155.3	11.7	1,215.2	58.8
II	1,394.1	11.7	---	8.2	1,414.0	21.2	165.4	12.2	1,215.1	58.7
III	1,389.2	12.2	---	10.4	1,411.8	23.2	161.4	11.6	1,215.6	58.6
IV	1,414.7	11.6	---	4.6	1,430.9	23.5	160.5	10.7	1,236.2	59.4
Year	5,586.8	15.2	---	25.2	5,627.1	91.6	642.8	10.7	4,882.1	235.5
1990										
I	1,390.3	10.7	---	1.9	1,402.8	18.4	167.3	13.4	1,203.7	57.7
II	1,412.8	13.4	---	4.1	1,430.4	18.8	173.1	14.4	1,224.1	58.6
III	1,412.4	14.4	---	2.7	1,429.5	25.9	168.9	13.1	1,221.7	58.4
Year 4/	5,663.5	10.7	---	10.7	5,684.9	93.0	679.2	12.0	4,900.6	234.3
1991										
Year 4/	5,715.0	12.0	---	8.0	5,735.0	98.0	720.0	12.0	4,905.0	232.6
Shell eggs										
1989										
I	1,388.8	0.3	219.6	1.4	1,170.9	9.1	155.3	0.5	1,006.0	48.7
II	1,394.1	0.5	257.3	7.6	1,144.8	9.7	165.4	0.8	968.9	46.8
III	1,389.2	0.8	245.1	9.9	1,154.8	16.2	161.4	0.7	976.6	47.0
IV	1,414.7	0.7	227.0	4.1	1,192.4	17.4	160.5	0.4	1,014.1	48.7
Year	5,586.8	0.3	949.0	22.9	4,662.9	52.4	642.6	0.4	3,967.5	190.6
1990										
I	1,390.3	0.4	240.6	1.4	1,151.4	12.1	167.3	0.7	971.3	46.6
II	1,412.8	0.7	268.0	3.8	1,149.4	12.1	173.1	0.7	963.5	46.1
III	1,412.4	0.7	274.8	2.5	1,140.8	13.7	168.9	0.5	957.7	45.8

1/ Totals may not add due to rounding. 2/ Shell eggs and approximate shell-egg equivalent of egg products. 3/ Hatching egg use for 1986-present calculated by a new method. 4/ Forecast. --- Not applicable for total egg supply and utilization.

Table 46--Average Bureau of Labor Statistics (BLS) retail price per pound of specified meat cuts

Year and item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Dollars											
Choice Beef:												
Ground chuck												
1988	1.74	1.74	1.75	1.75	1.74	1.77	1.75	1.75	1.77	1.78	1.81	1.79
1989	1.81	1.80	1.85	1.82	1.82	1.80	1.81	1.82	1.82	1.84	1.87	1.88
1990	1.91	1.95	1.94	1.97	1.97	1.97	1.95	1.97	1.99	1.97	2.00	2.02
Ground beef												
1988	1.31	1.32	1.34	1.34	1.36	1.39	1.37	1.37	1.37	1.39	1.41	1.40
1989	1.40	1.37	1.43	1.42	1.44	1.44	1.44	1.45	1.46	1.45	1.49	1.50
1990	1.56	1.57	1.57	1.59	1.58	1.59	1.58	1.58	1.59	1.58	1.62	1.63
Chuck roast, bone in												
1988	1.64	1.74	1.69	1.72	1.80	1.78	1.70	1.67	1.74	1.74	1.75	1.80
1989	1.81	1.91	1.87	1.89	1.90	1.86	1.86	1.78	1.88	1.89	1.92	2.00
1990	2.03	2.12	2.05	2.10	2.12	2.07	2.07	2.04	2.07	2.09	2.15	2.15
Round roast, boneless												
1988	2.56	2.61	2.67	2.60	2.61	2.66	2.63	2.64	2.64	2.60	2.68	2.68
1989	2.75	2.75	2.76	2.77	2.78	2.73	2.73	2.71	2.78	2.78	2.77	2.78
1990	2.91	2.89	2.93	2.92	2.95	2.92	2.93	2.92	2.89	2.97	2.95	3.02
Rib roast, bone in												
1988	3.57	3.59	3.66	3.75	3.72	3.93	4.02	4.04	4.12	4.12	4.10	4.03
1989	4.11	4.04	4.06	4.16	4.24	4.06	4.34	4.29	4.19	4.17	4.19	4.21
1990	4.29	4.29	4.37	4.33	4.44	4.54	4.62	4.57	4.65	4.66	4.56	4.54
Round steak, boneless												
1988	2.88	2.94	2.94	3.01	3.00	3.05	2.99	2.99	3.04	2.98	3.00	3.01
1989	3.07	3.09	3.12	3.14	3.10	3.06	3.11	3.12	3.10	3.12	3.18	3.17
1990	3.30	3.31	3.27	3.29	3.32	3.35	3.29	3.32	3.28	3.33	3.39	3.42
Sirloin steak, bone in												
1988	2.99	3.04	3.13	3.18	3.35	3.49	3.54	3.39	3.45	3.31	3.36	3.23
1989	3.39	3.40	3.61	3.57	3.70	3.67	3.70	3.66	3.62	3.55	3.57	3.46
1990	3.58	3.55	3.52	3.80	3.61	3.79	3.73	3.73	3.68	3.72	3.74	3.64
Chuck steak, bone in 1/												
1988	1.61	1.62	1.64	1.65	1.67	1.71	1.70	1.69	1.70	1.70	1.72	1.71
1989	1.74	1.74	1.78	1.78	1.79	1.78	1.79	1.79	1.80	1.80	1.81	1.83
1990	1.86	1.89	1.89	1.91	1.92	1.93	1.93	1.92	1.94	1.94	1.97	1.99
T-Bone steak, bone in												
1988	4.31	4.27	4.33	4.43	4.54	4.90	5.18	5.20	4.86	4.84	4.83	4.97
1989	4.95	4.91	5.05	5.04	5.14	5.16	5.22	5.10	5.15	5.08	4.99	5.04
1990	5.11	4.56	4.71	4.78	4.96	5.01	4.99	4.91	5.01	4.96	5.41	5.45
Porterhouse steak, bone in 1/												
1988	4.40	4.43	4.49	4.51	4.56	4.66	4.63	4.60	4.64	4.64	4.68	4.68
1989	4.74	4.76	4.86	4.86	4.89	4.87	4.88	4.89	4.90	4.90	4.96	4.99
1990	5.09	5.16	5.17	5.23	5.25	5.27	5.28	5.25	5.29	5.31	5.39	5.43
Pork:												
Bacon, sliced												
1988	1.95	1.94	1.92	1.91	1.90	1.90	1.91	1.88	1.84	1.86	1.80	1.79
1989	1.80	1.80	1.79	1.75	1.68	1.69	1.71	1.72	1.72	1.77	1.82	1.96
1990	1.97	2.01	1.99	1.98	2.04	2.15	2.21	2.24	2.18	2.21	2.24	2.28
Chops, center cut												
1988	2.66	2.72	2.68	2.71	2.78	2.93	2.90	2.87	2.90	2.77	2.67	2.65
1989	2.78	2.75	2.80	2.80	2.76	2.82	2.91	2.92	2.95	2.89	2.97	2.85
1990	3.02	2.96	3.01	3.16	3.20	3.44	3.47	3.51	3.36	3.37	3.37	3.32
Ham, rump or shank half 1/												
1988	1.63	1.57	1.60	1.58	1.58	1.62	1.62	1.62	1.61	1.59	1.56	1.55
1989	1.58	1.57	1.57	1.58	1.56	1.58	1.61	1.63	1.62	1.63	1.66	1.66
1990	1.70	1.70	1.82	1.72	1.78	1.89	1.91	1.94	1.92	1.93	1.94	1.94
Sirloin roast, bone in 1/												
1988	1.92	1.90	1.90	1.88	1.89	1.94	1.93	1.93	1.92	1.89	1.86	1.85
1989	1.89	1.88	1.88	1.88	1.86	1.89	1.92	1.94	1.93	1.94	1.97	1.98
1990	2.02	2.02	2.04	2.06	2.12	2.25	2.28	2.31	2.29	2.31	2.32	2.31
Shoulder picnic, bone in												
1988	1.14	1.13	1.14	1.12	1.09	1.15	1.13	1.11	1.11	1.10	1.12	1.10
1989	1.12	1.06	1.06	1.08	1.07	1.08	1.09	1.10	1.10	1.10	1.12	1.17
1990	1.14	1.18	1.18	1.21	1.24	1.28	1.30	1.32	1.35	1.39	1.39	1.41
Sausage, fresh, loose												
1988	2.05	1.97	1.99	2.02	2.02	1.95	1.99	1.94	1.95	1.90	1.89	1.92
1989	1.92	1.94	1.92	1.93	1.94	1.93	1.99	2.04	2.02	2.10	2.11	2.12
1990	2.12	2.20	2.16	2.21	2.29	2.41	2.49	2.50	2.49	2.52	2.39	2.42
Miscellaneous cuts:												
Ham, canned, 3 or 5 lb												
1988	2.77	2.75	2.71	2.73	2.74	2.73	2.77	2.73	2.74	2.74	2.69	2.60
1989	2.75	2.71	2.63	2.70	2.64	2.68	2.66	2.65	2.70	2.68	2.61	2.62
1990	2.72	2.77	2.75	2.68	2.77	2.85	2.84	Na	Na	Na	Na	Na
Frankfurters, all meat												
1988	2.02	2.05	2.05	2.01	2.02	2.02	2.01	2.02	2.00	2.02	2.03	2.04
1989	2.08	2.07	2.07	2.03	2.05	2.02	2.01	2.09	2.09	2.04	2.10	2.11
1990	2.16	2.22	2.23	2.19	2.18	2.31	2.31	2.28	2.37	2.37	2.44	2.40
Bologna												
1988	2.24	2.23	2.23	2.20	2.18	2.24	2.26	2.29	2.25	2.27	2.28	2.24
1989	2.22	2.24	2.23	2.24	2.23	2.24	2.24	2.27	2.34	2.38	2.37	2.40
1990	2.42	2.44	2.45	2.47	2.47	2.54	2.52	2.56	2.50	2.50	2.61	2.60

1/ ERS estimate from BLS index and historical data.   Na= Not available

Table 47--Selected price statistics for meat animals and meat, 1989-1990

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Dollars per cwt											
Slaughter Steers:												
Omaha												
Choice, 1000-1100 lb	76.73	76.61	78.15	79.36	77.57	75.63	74.46	76.22	75.75	77.50	79.93	80.88
Select, 1000-1100 lb	74.02	73.92	75.46	77.00	75.91	73.88	72.65	73.97	73.57	75.50	77.61	79.31
California												
Choice, 1000-1100 lb	77.19	78.67	78.38	78.13	75.90	74.34	74.75	76.70	76.75	77.58	77.81	77.75
Colorado												
Choice, 1100-1300 lb	78.45	78.30	79.30	79.78	78.13	76.61	75.35	77.63	78.07	79.65	80.89	80.62
Texas												
Choice, 1000-1100 lb	79.02	78.62	79.31	80.00	78.14	76.73	75.07	77.61	78.05	79.82	81.12	81.26
Slaughter heifers:												
Omaha												
Choice, 1000-1200 lb	77.69	77.48	78.42	79.51	77.82	76.08	74.77	76.46	76.41	78.38	80.70	81.19
Select, 900-1000 lb	73.32	73.15	74.19	75.63	74.56	72.41	71.04	72.28	72.17	74.27	76.33	77.89
Cows:												
Omaha												
Commercial	49.38	52.13	54.04	53.77	54.96	55.63	54.27	56.03	54.40	51.73	50.73	50.50
Breaking Utility	49.78	52.79	54.67	54.48	55.41	56.04	54.56	56.07	54.33	51.10	50.46	50.00
Boning Utility	51.22	54.86	55.96	55.84	56.37	58.42	56.88	56.90	54.46	53.23	50.75	51.00
Canner	43.27	46.83	49.25	49.21	50.12	52.00	50.58	51.75	48.71	45.80	43.42	44.50
Cutter	48.40	51.59	54.92	54.67	55.38	56.31	54.77	55.77	53.63	51.08	49.04	50.00
Vealers: 1/												
Choice, New York	99.35	104.38	101.50	102.88	102.00	99.88	96.00	94.60	95.50	95.00	90.63	89.63
Feeder steers:												
Kansas City												
Medium No. 1,												
400-500 lb	97.40	101.00	102.88	104.88	105.30	108.50	107.50	105.50	nq	nq	103.75	105.00
600-700 lb	85.70	84.88	87.50	90.81	91.90	94.13	93.50	92.30	91.50	nq	92.75	92.67
All weights and grades	82.47	82.86	83.15	85.42	85.14	87.77	86.82	87.30	87.58	nq	89.51	89.34
Okla. City												
Medium No. 1												
400-500 lb	101.23	105.13	105.89	111.35	109.74	106.14	106.03	110.42	106.41	104.25	108.96	112.33
600-700 lb	87.34	85.35	87.85	91.13	93.71	94.74	93.35	96.50	94.41	92.14	93.56	95.67
700-800 lb	84.86	82.14	82.18	84.49	86.80	90.39	90.02	91.54	90.91	90.30	92.42	93.19
Amarillo												
Medium No. 1,												
600-700 lb	85.45	84.13	86.13	85.88	87.30	87.63	89.44	94.10	90.88	90.00	89.88	92.00
Georgia Auctions												
Medium No. 1,												
600-700 lb	80.40	82.00	83.75	86.75	86.80	87.13	86.67	87.60	85.00	82.20	82.00	86.67
Medium No. 2,												
400-500 lb	83.20	89.25	92.13	93.13	90.90	89.88	88.17	91.40	87.63	86.90	89.38	92.17
Feeder heifers:												
Medium No. 1,												
Kansas City												
400-500 lb	85.60	89.50	92.13	92.88	95.20	94.38	91.50	91.00	nq	nq	90.25	91.00
600-700 lb	80.80	80.75	80.38	84.69	85.50	84.75	84.75	85.20	85.50	nq	86.75	87.50
Okla. City												
400-500 lb	87.64	90.39	92.14	95.47	96.03	94.30	91.53	96.30	92.97	91.23	97.60	98.92
600-700 lb	81.83	79.81	80.83	83.10	85.50	87.14	87.61	89.74	87.49	85.25	86.58	88.88
Slaughter hogs:												
Barrows and gilts												
Omaha No. 1 & 2,												
230-240 lb	49.33	50.33	53.03	54.80	63.54	61.71	63.18	57.59	55.91	57.60	50.88	49.87
All weights	48.52	47.22	51.76	54.32	62.21	60.71	62.31	56.94	55.34	57.71	50.01	48.56
Sioux City	48.41	49.48	52.56	54.63	62.80	61.34	62.54	56.37	55.64	58.02	50.17	48.96
7 markets 2/	47.94	48.51	51.91	54.11	62.18	60.75	61.87	56.05	55.10	57.15	49.70	48.15
Sows:												
7 markets 2/	43.88	43.91	47.61	51.49	54.27	52.45	49.20	50.53	47.04	50.38	45.64	41.73
Feeder pigs:												
No. 1 & 2, So. Mo.,												
40-50 lb (per hd.)	44.58	54.41	63.19	64.97	56.80	47.32	46.35	45.85	45.91	52.33	46.22	49.63
Slaughter lambs:												
Choice, San Angelo	54.80	60.38	63.69	63.13	62.25	53.56	53.25	51.20	51.75	52.50	50.42	48.08
Choice, So. St. Paul	55.88	61.68	63.43	57.43	61.70	53.75	51.71	49.82	49.00	50.20	45.89	46.06
Ewes, Good,												
San Angelo	38.30	38.47	38.81	36.50	33.25	32.38	34.83	36.60	32.88	32.00	33.83	34.67
So. St. Paul	23.30	22.00	22.65	17.85	13.88	13.93	15.47	19.74	14.91	16.69	17.11	19.43
Feeder lambs:												
Choice, San Angelo	72.10	74.88	75.63	71.31	64.30	56.50	53.75	58.30	55.75	55.90	57.83	59.17
Choice, So. St. Paul	65.96	68.65	70.00	62.38	64.88	56.45	51.16	48.36	49.50	50.30	49.50	49.70
Farm prices:												
Beef cattle	73.70	74.60	74.20	74.60	74.40	74.40	73.60	76.10	75.00	75.50	75.30	77.60
Calves	91.00	96.00	99.10	100.40	101.00	98.10	96.50	99.20	95.00	92.80	93.90	97.20
Hogs	47.30	48.20	51.30	53.80	61.20	60.10	60.80	55.90	54.30	56.80	50.20	47.60
Sheep	32.20	30.90	30.00	23.50	19.70	19.60	24.70	24.30	18.90	20.00	20.40	25.50
Lambs	56.40	59.80	66.00	62.90	59.80	55.40	54.40	54.00	52.80	52.00	50.10	49.60

Table 47--Selected price statistics for meat animals and meat, 1989-1990--Continued

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Dollars per cwt						
Meat prices:												
Wholesale												
Central U.S. markets												
Cow beef, Canner and Cutter	99.89	100.95	102.04	100.61	101.29	101.51	101.62	105.22	101.93	96.01	91.11	97.32
Boxed beef cut-out												
Choice, 1-3												
550-700 lb	121.75	120.97	122.10	123.62	124.56	121.53	118.54	121.52	121.18	124.96	128.32	129.48
700-850 lb	121.24	120.28	121.61	123.64	125.98	122.56	118.85	121.26	120.33	124.41	128.41	128.73
Select, 1-3												
550-700 lb	115.85	117.22	118.79	119.31	115.75	114.20	113.43	115.13	115.17	116.84	118.83	118.65
700+ lb	115.80	117.03	118.62	119.25	116.54	114.94	113.58	115.23	114.66	115.78	118.38	118.02
Cutter Cows	99.89	100.95	102.04	100.61	101.29	101.51	101.62	112.13	101.93	102.58	99.67	104.74
Pork loins												
14-18 lb 3/	101.36	107.75	117.26	120.68	136.06	125.62	144.14	119.56	121.64	113.71	98.94	103.50
Pork bellies												
12-14 lb	48.65	42.53	42.60	52.60	61.48	65.15	53.18	51.08	51.31	59.83	60.57	56.58
Hams, skinned												
14-17 lb	68.44	76.50	79.00	77.33	81.60	nq	91.00	nq	101.75	107.24	108.00	86.13
17-20 lb	67.95	75.38	77.68	74.11	81.67	85.60	89.20	91.29	95.82	104.32	97.96	77.46
Pork cut-out value 4/	63.49	65.30	69.54	72.14	81.49	80.61	82.31	76.81	76.16	77.98	72.88	69.32
East Coast Lamb												
Choice and Prime												
35-45 lb	127.05	142.81	145.25	135.56	128.75	119.94	124.88	118.25	117.88	121.25	120.25	120.25
55-65 lb	112.25	127.81	135.25	123.38	125.25	120.25	124.88	120.25	120.00	120.25	114.75	113.75
						Cents per lb						
Retail												
Beef												
Choice	274.4	271.0	272.5	277.9	283.6	282.1	279.9	280.6	280.6	282.7	291.6	295.3
All fresh	247.8	249.1	249.1	252.9	251.5	254.0	255.8	254.7	256.4	259.4	263.4	265.8
Pork	195.1	196.5	197.0	200.9	206.2	218.1	222.2	224.9	220.8	223.2	222.9	223.2
						Indexes, 1982-84=100						
Price indexes: (BLS)												
Retail meats	122.3	123.5	124.0	125.2	126.6	129.6	130.3	130.5	131.0	131.7	133.1	133.6
Beef and veal	124.5	126.2	126.6	128.0	128.5	129.0	129.2	128.5	129.5	130.1	131.9	133.0
Pork	119.7	119.7	121.0	121.6	125.5	132.9	134.8	136.5	135.4	136.4	137.1	136.8
Other meats	121.6	122.9	122.7	124.4	124.2	127.4	127.9	128.0	129.8	130.0	131.4	131.6
Poultry	128.6	130.5	134.8	132.1	132.3	134.0	135.3	133.6	134.6	133.7	130.5	129.7
Livestock-feed ratios												
Omaha: 5/												
Steer-corn	34.2	34.0	32.6	31.1	29.3	27.9	28.5	30.9	34.5	36.5	37.3	36.5
Hog-corn	21.6	22.0	21.9	21.2	23.6	22.4	23.9	23.1	25.1	27.0	23.2	22.0

1/ Beginning Jan. 1989 New York auctions (150-250 lb). 2/ St. Louis N.S.Y., Kansas City, Omaha, Sioux City, So. St. Joseph, So. St. Paul, and Indianapolis. 3/ Prior to 1984, 8-14 lb; 1984 and 1985, 14-17 lb; 1986, 14-18 lb. 4/ U.S. #2, 175 lb carcass. 5/ Bushels of No. 2 yellow corn equivalent in value to 100 pounds live weight.

Table 48--Selected marketings, slaughter, stocks, and trade for meat animals and meat, 1989-1990

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
							1,000 head						
Federally inspected:													
Slaughter													
Cattle	2,694	2,600	2,775	2,437	2,696	2,552	2,920	2,873	2,789	2,918	2,553	2,877	2,622
Steers	1,257	1,245	1,324	1,208	1,363	1,314	1,511	1,486	1,418	1,475	1,245	1,360	1,264
Heifers	789	766	807	749	814	751	874	894	889	906	822	893	764
Cows	591	542	590	434	469	437	478	438	429	475	433	563	543
Bulls and stags	58	47	54	45	50	49	57	54	52	62	53	59	51
Calves	175	167	175	145	165	128	137	132	139	147	132	158	149
Sheep and lambs	467	457	479	431	481	466	465	426	430	463	422	490	465
Hogs	7,815	7,012	7,407	6,643	7,279	6,785	6,799	6,152	5,983	7,110	6,722	7,546	7,336
Percentage sows	4.5	4.7	4.5	3.7	3.9	4.1	4.6	5.3	5.5	5.2	4.6	4.4	4.2
							Pounds						
Average live wt per head													
Cattle	1,159	1,156	1,150	1,150	1,136	1,117	1,113	1,120	1,128	1,146	1,149	1,154	1,149
Calves	250	237	246	261	264	270	285	285	278	287	290	298	289
Sheep and lambs	127	129	129	131	130	126	128	126	123	122	123	125	125
Hogs	251	250	249	248	249	250	251	252	249	249	247	250	253
Average dressed wt													
Beef	692	688	684	687	682	672	676	678	685	696	698	696	688
Veal	152	144	149	158	162	168	181	185	180	185	187	191	185
Lamb and mutton	65	66	66	67	66	64	65	64	63	62	62	63	64
Pork	181	179	180	179	179	180	181	182	180	180	179	180	183
							Million pounds						
Production													
Beef	1,855	1,783	1,889	1,668	1,831	1,709	1,967	1,943	1,903	2,024	1,777	1,995	1,798
Veal	26	24	26	23	26	21	24	24	24	27	24	30	27
Lamb and mutton	30	30	31	28	32	30	30	27	27	29	26	31	29
Pork	1,410	1,252	1,327	1,186	1,300	1,219	1,228	1,116	1,075	1,278	1,199	1,357	1,340
Commercial: 1/							1,000 head						
Slaughter													
Cattle 1/	2,785	2,680	2,851	2,502	2,764	2,618	2,989	2,934	2,852	2,983	2,615	2,960	2,701
Steers	1,299	1,284	1,360	1,241	1,398	1,348	1,547	1,518	1,450	1,508	1,275	1,400	1,302
Heifers	815	789	829	769	834	771	894	913	910	926	841	919	787
Cows	611	559	606	446	481	448	490	448	439	486	443	580	559
Bulls and Stags	60	48	56	46	51	51	58	55	53	63	55	61	53
Calves	182	172	181	150	171	133	142	137	144	152	138	162	155
Sheep and Lambs	481	469	489	441	493	487	478	440	447	482	439	507	480
Hogs	8,039	7,233	7,605	6,820	7,454	6,959	6,976	6,322	6,154	7,301	6,896	7,738	7,536
							Million pounds						
Production													
Beef	1,906	1,828	1,932	1,705	1,870	1,747	2,007	1,979	1,939	2,062	1,813	2,042	1,842
Veal	28	25	27	24	28	23	26	25	26	28	26	31	29
Lamb and mutton	31	31	32	29	32	31	31	28	28	30	27	32	30
Pork	1,446	1,288	1,359	1,215	1,328	1,247	1,256	1,142	1,102	1,309	1,228	1,389	1,374
Cold storage stocks: 2/													
Beef	238	246	261	269	308	296	272	258	266	240	243	267	278
Veal	4	4	4	4	4	5	5	5	6	6	6	6	6
Lamb and mutton	8	8	8	8	8	8	8	10	10	9	9	8	8
Pork	279	256	272	308	297	319	323	293	256	225	226	232	222
Total meat	554	536	565	610	638	651	633	592	566	507	507	537	536
Trade:													
Imports (carcass wt)													
Beef and veal 3/	180.4	195.4	202.3	189.7	206.0	173.7	188.7	210.6	195.6	209.5	192.2	187.2	195.6
Lamb, mutton, and goat	4.5	6.7	4.5	3.9	4.5	3.9	4.1	5.6	4.6	5.2	5.0	7.6	5.6
Pork	66.8	66.8	64.0	69.2	82.8	76.3	70.9	83.5	57.6	80.6	68.1	81.1	75.2
Exports (carcass wt)													
Beef and veal 3/	88.5	79.1	72.9	73.3	86.2	70.4	85.0	81.7	84.5	100.6	84.5	89.7	96.7
Lamb and mutton	0.2	0.1	0.2	0.2	0.2	0.4	0.2	0.1	0.3	0.2	0.2	0.2	0.2
Pork	26.1	24.7	25.2	21.3	22.9	23.0	20.1	15.6	15.0	15.6	16.7	18.3	21.3

1/ Federally inspected and other commercial. Classes estimated. 2/ End of month. Beginning January 1977, excludes beef and pork stocks in cooler. 3/ Beginning January 1989, veal trade is no longer reported separately.

Revisions in Conversion Factors for Pork Consumption Series

by Lawrence A. Duewer, Kevin Bost, and Gene Futrell*

Abstract: Conversion factors used to adjust carcass-weight pork consumption (disappearance) to retail and boneless equivalent weights did not fully reflect changes in leaner hog production and merchandizing changes. Results of a recent examination indicated that pork consumption, on a retail weight basis, has been overstated in recent years and boneless weight consumption understated. Revisions, reflecting changes in the amounts of fat, bone, and skin sold at retail, have been made for 1955 through 1990.

Keywords: Pork, meat consumption, conversion factors, disappearance, livestock-meat

Conversion factors are used to adjust carcass weight pork consumption (disappearance) to retail and boneless equivalent weights. Disappearance calculations are shown in supply and utilization tables in each issue of the *Livestock and Poultry Situation and Outlook Report*. Pork production, stocks, and foreign trade used for the calculations shown in the tables are reported on a carcass weight basis and the consumption (carcass weight disappearance) can be used as a basis point for other consumption series.

The purpose of the pork retail-consumption-per-capita series is to measure the quantity of pork purchased by consumers. This retail series is a standard quantity for which there is an associated price. The pork boneless-trimmed-equivalent series provides a closer estimate of the amount actually consumed than the retail-equivalent series does. It is also useful for comparison with other meats, as it is essentially retail product purchased on a boneless-equivalent basis, to determine relative consumption levels.

History

Pork production and consumption prior to 1977 were calculated and reported on a pork-excluding-lard basis. Lard was a valuable part of the hog in terms of price and quantity. As a result, lard production and consumption were reported in a separate supply and utilization series. By 1977 lard had become less valuable, hogs were much leaner, and the procedure for determining pork-excluding-lard needed revision.

The procedure implemented in 1977 was to switch from pork-excluding-lard to carcass- weight-of-production (as reported by NASS-USDA). The conversion factor used to obtain retail-weight pork consumption was estimated based on the USDA series on lard and pork fat rendered. Use of carcass weight made pork data comparable to other red meats. This data was available prior to 1977, but had not been used in the pork supply and utilization tables.

The factor for converting pork-excluding-lard to a retail weight basis prior to 1977 was a constant (0.93). Procedures adopted in 1977 varied the conversion factor as hogs became more meat and less fat. These were distinct changes in procedure for making both carcass and retail weight calculations. The 1977 procedures were used to revise the pork series back to 1955. The factors used to convert from a carcass-to-retail-weight basis started at 0.76 in 1955 and increased to 0.948 by 1990.

When a boneless equivalent series was developed in the mid-1980's[1], a factor of 0.67 (that did not change over time) was adopted to convert from a carcass to a boneless equivalent basis.

Need for Change

Pork production is still reported on a carcass weight basis by NASS-USDA. The retail weight consumption data reported by USDA, however, has been adjusted only by the fat removed, as measured by lard production. This lard-production series is no longer reported. Currently, pork is much leaner, is trimmed more closely, and larger quantities are being retailed boneless with little or no skin. The proportion of carcass weight purchased by consumers is lower than indicated by the previous conversion factor methodology and the published retail weight series.

The type of hog produced and the way pork is merchandized have changed over time. Thus the constant 0.67 used to convert data from a carcass to a boneless-equivalent basis also needed to be changed. Table 1 indicates how the previous series compares to the new series for both retail and boneless consumption.

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[1] U.S. Department of Agriculture, Economics, Statistics, and Cooperative Service. Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products. Satistical Bulletin No. 616, March 1979, p. 19.

Table A.1--New and previous pork consumption data series and derivations

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
										----Revised----		---Previous---	
	Carcass weight per capita	Removed per 100 pounds of pork carcass						Conversion ---Factor---					
				----- Bone -----		----- Total -----							
Year		Fat	Skin	Retail	Boneless	Retail (C+D+E)	Boneless (C+D+F)	Retail	Boneless	Retail weight (B*I)	Boneless weight (B*J)	Retail weight	Boneless weight (B*.67)
	Pounds	-------- Pounds per 100 pounds carcass --------								------ Pounds per capita ------			
1955	82.45	20.6	3.0	1.4	15.0	25.0	38.6	0.750	0.614	61.8	50.6	63.1	55.2
1956	83.39	20.5	3.0	1.4	15.0	24.9	38.5	0.751	0.615	62.6	51.3	63.4	55.9
1957	75.75	20.4	3.0	1.4	15.0	24.8	38.4	0.752	0.616	57.0	46.7	57.6	50.8
1958	73.62	20.0	3.1	1.6	15.0	24.7	38.1	0.753	0.619	55.4	45.6	56.9	49.3
1959	82.16	19.6	3.2	1.8	15.0	24.6	37.8	0.754	0.622	61.9	51.1	63.4	55.0
1960	78.29	19.2	3.3	2.0	15.0	24.5	37.5	0.755	0.625	59.1	48.9	61.3	52.5
1961	74.96	18.8	3.4	2.2	15.0	24.4	37.2	0.756	0.628	56.7	47.1	58.6	50.2
1962	75.65	18.4	3.5	2.4	15.0	24.3	36.9	0.757	0.631	57.3	47.7	59.8	50.7
1963	76.97	17.9	3.6	2.7	15.0	24.2	36.5	0.758	0.635	58.3	48.9	61.6	51.6
1964	76.94	17.4	3.7	3.0	15.0	24.1	36.1	0.759	0.639	58.4	49.2	61.6	51.5
1965	68.14	16.9	3.8	3.3	15.0	24.0	35.7	0.760	0.643	51.8	43.8	55.5	45.7
1966	66.58	16.4	3.9	3.6	15.0	23.9	35.3	0.761	0.647	50.7	43.1	55.0	44.6
1967	72.77	15.9	4.0	3.9	15.0	23.8	34.9	0.762	0.651	55.5	47.4	60.5	48.8
1968	74.31	15.4	4.1	4.2	15.0	23.7	34.5	0.763	0.655	56.7	48.7	62.2	49.8
1969	71.96	14.7	4.3	4.6	15.0	23.6	34.0	0.764	0.660	55.0	47.5	61.2	48.2
1970	73.14	14.1	4.4	5.0	15.0	23.5	33.5	0.765	0.665	56.0	48.6	62.4	49.0
1971	79.15	13.4	4.6	5.4	15.0	23.4	33.0	0.766	0.670	60.6	53.0	68.5	53.0
1972	71.32	12.8	4.7	5.8	15.0	23.3	32.5	0.767	0.675	54.7	48.1	62.9	47.8
1973	63.77	12.1	4.9	6.2	15.0	23.2	32.0	0.768	0.680	49.0	43.4	57.4	42.7
1974	68.71	11.4	5.1	6.6	15.0	23.1	31.5	0.769	0.685	52.8	47.1	61.8	46.0
1975	55.86	10.7	5.3	7.0	15.0	23.0	31.0	0.770	0.690	43.0	38.5	51.1	37.4
1976	59.06	10.0	5.5	7.4	15.0	22.9	30.5	0.771	0.695	45.5	41.0	54.1	39.6
1977	60.93	9.4	5.7	7.7	15.0	22.8	30.1	0.772	0.699	47.0	42.6	56.2	40.8
1978	60.84	8.8	5.9	8.0	15.0	22.7	29.7	0.773	0.703	47.0	42.8	56.4	40.8
1979	69.43	8.3	6.0	8.3	15.0	22.6	29.3	0.774	0.707	53.7	49.1	64.3	46.5
1980	73.96	7.8	6.1	8.6	15.0	22.5	28.9	0.775	0.711	57.3	52.6	68.7	49.6
1981	70.48	7.3	6.2	8.9	15.0	22.4	28.5	0.776	0.715	54.7	50.4	65.5	47.2
1982	63.16	7.0	6.3	9.0	15.0	22.3	28.3	0.777	0.717	49.1	45.3	59.1	42.3
1983	66.34	6.7	6.4	9.1	15.0	22.2	28.1	0.778	0.719	51.6	47.7	62.4	44.4
1984	65.89	6.4	6.5	9.2	15.0	22.1	27.9	0.779	0.721	51.3	47.5	61.9	44.1
1985	66.30	6.1	6.6	9.3	15.0	22.0	27.7	0.780	0.723	51.7	47.9	62.4	44.4
1986	62.66	5.8	6.7	9.6	15.0	22.1	27.5	0.779	0.725	48.8	45.4	59.0	42.0
1987	62.97	5.5	6.8	9.9	15.0	22.2	27.3	0.778	0.727	49.0	45.8	59.7	42.2
1988	67.23	5.4	6.8	10.1	15.0	22.3	27.2	0.777	0.728	52.2	48.9	63.7	45.0
1989	66.60	5.3	6.8	10.3	15.0	22.4	27.1	0.776	0.729	51.7	48.6	63.1	44.6
1990 1/	64.00	5.3	6.8	10.3	15.0	22.4	27.1	0.776	0.729	49.7	46.7	60.7	42.9

1/ Forecast

Conversion Factor Changed

The first step in developing the new conversion factors was to (a) determine the cutout of an average hog (yield of unprocessed cuts) and (b) determine how individual cuts were merchandized (table 1).

To determine the cutout, the hog (mostly represented by market barrows and gilts) was first divided into yields of the various fresh wholesale products that would account for the total live weight. The average carcass yield was estimated at 73.5 percent of liveweight.

Determination of cutting procedures (bone-in versus boneless) and processed proportions were used to obtain the processing coefficients and subcut percentages. The results were converted to percentages of the carcass or retail weight.

Calculations of the product yield or processing coefficients are quite complicated. The processing coefficent for picnic will illustrate the calculations. Approximately 90 percent of the picnics are deboned and 10 percent are sold bone-in. All of the deboned picnics are assumed to be sold fresh and yield 75 percent boneless picnic meat (cushion in). The other 25 percent are bone and skin. Thus .90 x .75 = .675. One half of the picnics sold bone-in are smoked. Of the smoked bone-in picnics, 90 percent are product, adjusted for trimming and facing, plus the water added in processing (.05 x .90 = .045). Whereas, the bone-in fresh picnics are 80 percent product after trimming and facing (.05 x .80 = .040). Totaling all forms of picnics merchandized (.675 + .045 + .040 = .760), 76 percent of the original picnic weight is sold to consumers. This 0.76 is the processing coefficient for picnics in column 3 of table 2.

The final part of step one was the yield determination of all cuts and/or subcuts per 100 pounds of carcass weight. The 77.6 pounds of principal and minor carcass cuts per 100 pounds of carcass product is equivalent to 0.776 pounds of retail product per pound of carcass. This was the conversion factor used to change the 1989 carcass-weight product to retail-weight product (columns 6 and 7, table 2). These conversion factors will be used for 1990 and reevaluated in the future, as necessary to reflect changes within the sector.

The second step was to determine a similar value (carcass-to-retail conversion factor) for an earlier date. The year picked was 1955 and the conversion factor chosen was set at 0.75, based on 1956 information[2].

[2] U.S. Department of Agriculture, Agricultural Marketing Service. Pork Marketing Margins and Costs. Miscellaneous Publication No. 711, April 1956, p. 33.

Table A.2--Weight of pork cuts - from hog to consumer

Cuts and subcuts	Packer style yield green cuts per 100 lb liveweight	Processing coefficients	Subcuts per 100 lb liveweight	Cuts per 100 lbs. liveweight	Per 100 lb carcass Subcuts	Per 100 lb carcass Cuts	Per 100 lbs retail a/
Hams	17.7	.816		14.5		19.7	
Smoked bone-in			3.6		4.9		6.7
Smoked boneless			7.8		10.6		14.4
Trimming			3.1		4.2		5.7
Loins	13.8	.900		12.4		16.9	
Bone-in			8.1		11.0		15.0
Boneless			4.3		5.9		8.0
Bellies	12.5	.850		10.6		14.5	
First-cut			8.7		11.9		16.2
End and pieces			1.9		2.6		3.5
Spareribs	2.9	1.000	2.9	2.9	3.9	3.9	5.3
Picnics	6.8	.760		5.2		7.1	
Fresh Bone-in			.3		.4		.5
Smoked Bone-in			.3		.4		.6
Fresh Boneless			4.6		6.3		8.6
Butts	4.8	.994	4.7	4.7	6.4	6.4	8.7
72% trimming	2.7						
42% trimming	.9	1.000	3.6	3.6	4.9	4.9	6.7
Principal products subtotal	62.1	---	54.0	54.0	73.4	73.4	100.0
Minor carcass cuts							
Jowl	1.0	1.000	1.0	1.0	1.4	1.4	
Neckbone	1.0	1.000	1.0	1.0	1.4	1.4	
Feet	.8	1.000	.8	.8	1.1	1.1	
Tail	.2	1.000	.2	.2	.3	.3	
Principal and minor carcass cuts subtotal	65.1	---	57.0	57.0	77.6	77.6	
Carcass by-products							
Loose lard	5.5	1.000	5.5	5.5	7.5	7.5	
Skin	.2	1.000	.2	.2	.3	.3	
Residual	2.7	1.000	2.7	2.7	3.7	3.7	
Processing loss	--		8.1	8.2	10.9	10.9	
Carcass Yield	73.5		73.5	73.5	100.0	100.0	
Edible by-products							
Heart	.3		.3	.3			
Kidney	.2		.2	.2			
Liver	1.3		1.3	1.3			
Tongue	.2		.2	.2			
Stomach	.4		.4	.4			
Melts	.2		.2	.2			
Headmeat	.4		.4	.4			
Chitterlings	1.1		1.1	1.1			
Cheekmeat	.3		.3	.3			
Inedible products and other	22.1		22.1	22.1			
Total	100.0		100.0	100.0			

a/ Assumes no cutting loss (after the application of the processing coefficients).

So 0.75 was the 1955 conversion factor from carcass weight to retail cuts and 0.776, the 1989 conversion factor. The third step was to determine the conversion factor for the in-between years. The difference between the 0.75 or 0.776 and 1.000 is the fat, skin, and bone removed to obtain the retail product. In table 1, column G, this difference per 100 pounds is estimated annually, moving from 25 for 1955 to 22.4 for 1989.

In 1955 a higher percentage of the carcass was fat, but much of the fat was removed before retail sale. Also, pork was retailed with more skin and bone.

The fat series used in table 1 is based on the published data series on lard production[3]. The estimated percentages, reflecting the removal of bone and skin, are changed gradually from 1955 to 1989. The total (column G in table 1) reflects a slow change over time, but includes the assumption that retailers began trimming pork closer after 1985 (at the same time they began trimming beef closer).

The amount of fat, skin, and bone removed from carcass weight to obtain boneless trimmed product is indicated in column H of table 1. It reflects a conversion factor consistent with removed each year instead of the estimated amount of estimated actual bone removed before retail sale.

Revised Series

The conversion factors (columns I and J) for each year are calculated for each the retail and boneless equivalent series as follows: the percent of product not sold (table 1 column G or H) is subtracted from 100 and the result divided by 100.

[3] The Lard Series in Livestock Slaughter was discontinued after June 1989. It was published by the National Agricultural Statistics Service, U.S. Department of Agriculture.

The new conversion factors, multiplied by carcass weight (column B) provides the new retail and boneless consumption series. The previous retail and boneless weight series are presented for comparison purposes.

The carcass weight consumption series has not changed from 1977 procedure estimates. Columns K and L are the new retail and boneless consumption series. The trend of the retail series being replaced was relatively level over time, while the trend in the revised proposed series decreases over time. This decrease results primarily from the removal of skin and bone. The previous series reflected only the change in lard production. The proportion of lard in the carcass decreased during the 1955-89 period and the weight reflected in this decline shifted to the retail weight. This resulted in increased lean meat yields and a different retail weight trend from the carcass trend. The revised procedure, by removing more skin and bone, more accurately reflects the pounds purchased at retail and is more comparable to the retail prices reported. The boneless conversion factor reflects carcass proportions and indicates very little change over time. Pork consumption on a boneless basis has been relatively stable from 1955 to 1989.

The new boneless series remains fairly flat while the carcass weight series, the new retail weight series, and the previous boneless series decrease over time. The carcass weight series indicates a decrease over time because of less fat and more lean. The previous boneless series reflected a constant conversion factor and thus exhibited the same slope as the carcass series.

The new boneless conversion factor reflects less fat in the carcass in later years. Removal of more skin and closer trimming at retail also are reflected in the retail conversion factor. The flatter line for the boneless series indicates that lean meat available for consumption has not decreased as the carcass or retail series might suggest.

Summary and Conclusions

The revised estimates obtained using the revised conversion factors for pork indicate that retail weight per capita disappearance and the per capita carcass weight series of pork have decreased. But, since the decline in carcass weight disappearance results from more meat and less fat and the retail weight series decreases as more pork is sold boneless, the boneless series, on a per capita basis, is relatively flat over time.

These new procedures and conversion factors more accurately indicate the relationships between carcass, retail, and boneless pork disappearance series as well as with other red meats. It is recommended that these conversion factors for pork be reexamined periodically as pork production and/or pork merchandising practices change.

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